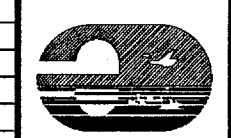


FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
- 1. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX (A), UNLESS NOTED OTHERWISE.
 - 2. WORK THIS DRAWING WITH DRAWINGS 20637 THRU 20646
 - 3. ALL PIPING RUNNING BETWEEN BUILDINGS IS UNDERGROUND EXCEPT AS NOTED.
 - 4. Δ INDICATES REVISION LEVEL.

3	10/27/03	JM	MPW	REB	INCRP DCR 98-004 CA 00 PER CR 03-00510 REV00
2	1/18/98	MRB	GPM	GRM	INCORPORATED DCR 86-320 CA REVISED NOTE 1, DRAWING ENHANCEMENTS ADDED; REF. DWG. NOTE
1	1/21/87	MPW	WRD	VMS	REVISED PER LATEST SYSTEM DRAWINGS & ADDED NOTE 4.
0	4/25/86	DBF	JDM	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

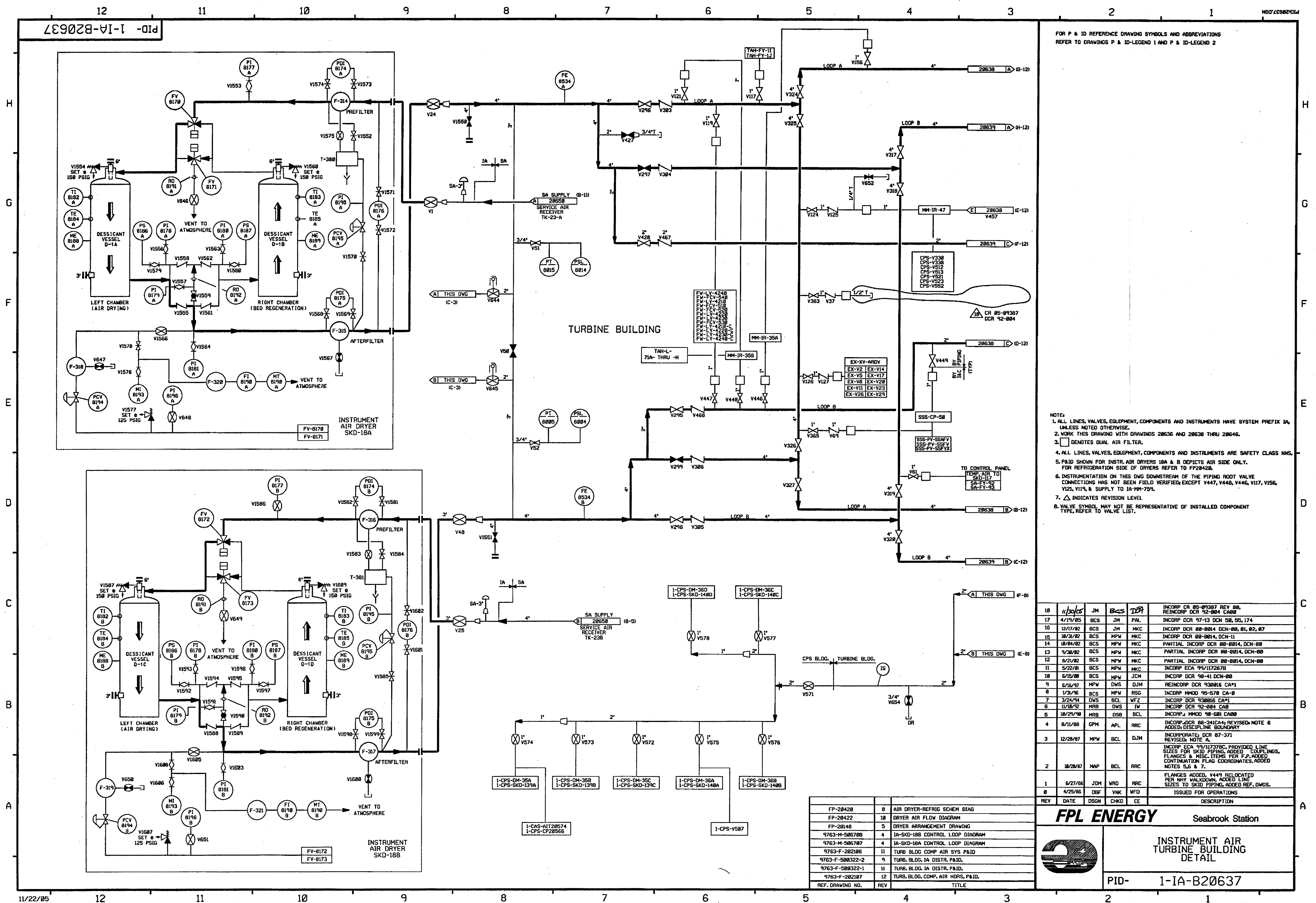
FPL ENERGY Seabrook Station

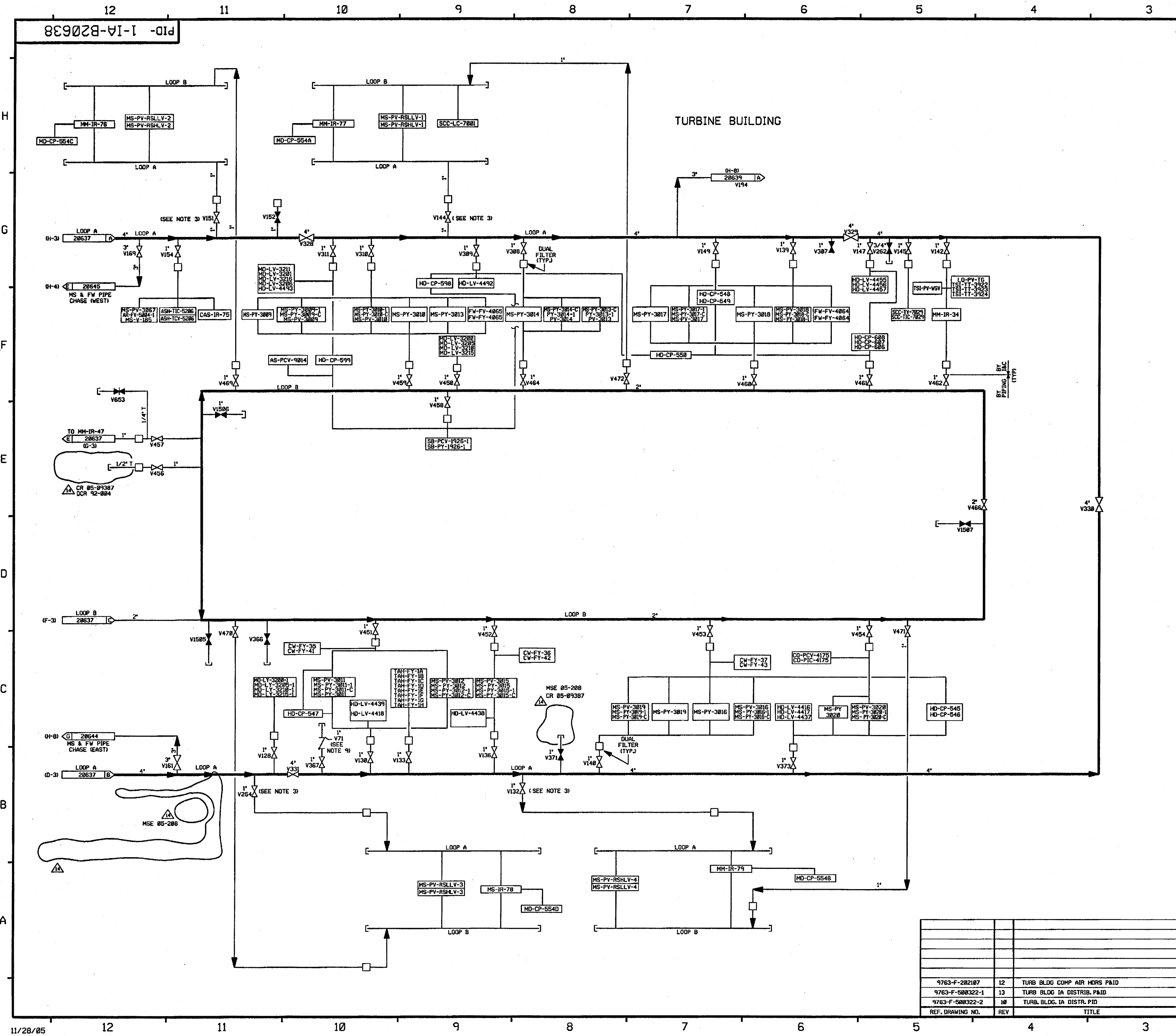


INSTRUMENT AIR
OVERVIEW

PID- 1-IA-B20636

REF. DRAWING NO.	REV	TITLE
9763-F-202109	9	MISC BLDGS COMP AIR HDRS PAID
9763-F-202107	12	TURB BLDG COMP AIR HDRS PAID
9763-F-202106	11	COMPRESSED AIR SYS. P & ID
9763-F-202108	15	MISC. BLDGS. COMP. AIR HEADER SH. 1 OF 2
9763-F-202105	11	COMPRESSOR AIR SYSTEM KEY PLAN



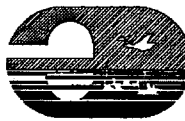


FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2.

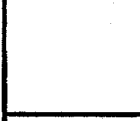
NOTES:

1. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
2. WORK THIS DRAWING WITH DRAWINGS 20636, 20637 & 20639 THRU 20646.
3. THE FOLLOWING VALVES ARE FOR SERVICING THE OPERATING FLOOR, V-254, V-132, V-244 & V-151.
4. DENOTES DUAL AIR FILTER
5. ALL LINES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.
6. INSTRUMENTATION ON THIS DWG. DOWNSTREAM OF THE PIPING ROOT VALVE CONNECTION HAS NOT BEEN FIELD VERIFIED, EXCEPT SUPPLY TO IA-MM-760.
7. SYSTEM DESCRIPTION IS SD-4.
8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.
9. INTERNALS OF IA-V71 HAVE BEEN REMOVED AND VALVE IS NON-FUNCTIONAL.

14	11/30/05	JM	BS	TEA	INCCORP. CR 05-09387 REV. 00 & DWG 202294 REV 5 AND MSE 05-208 REV 00; REINCCORP. DCR 92-004 CA00
13	2/18/05	BCS	JM	RRB	INCCORP. CR 03-06014 REV. 00
12	12/17/02	BCS	JM	MKC	INCCORP. DCR 00-014 DCR-02
11	6/19/97	MPW	DWS	RSG	INCCORP. DCR 94-03 DCR 07
10	6/18/97	MPW	DWS	GRM	INCCORP. DCR 95-39 CA 29 & 46
9	1/31/97	BCS	DWS	RSG	INCCORP. M400 95-570 CA-0
8	12/2/95	BCL	MPW	RJF	REINCCORP. DCR 91-12 CA0 & 95-39 CA 0
7	11/10/92	MRB	DWS	IV	INCCORP. DCR 92-4 CA0
6	9/9/92	MRB	DWS	IV	INCCORP. DCR 91-6 CA0
5	4/28/92	DWS	BCL	RSG	INCCORP. M400 900616 CA0
4	10-10-91	MRB	JM	IV	PARTIAL INCCORP. OF DCR 91-6 CA0
3	8/29/89	MRB	BCL	IV	INCCORP. DCR 89-31 CA 0
2	8/11/88	GPM	APL	RRC	INCCORP. DCR 86-341CA4 & DR 82-189A REVISED, NOTE 5 & 6 ADDED DISCIPLINE BOUNDARY
1	10/24/86	MRJ	WFO	PHH	REVISED REF. DCS, & DRAFTING ERRORS
0	4/25/86	DBF	JDM	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

Seabrook Station

**INSTRUMENT AIR
TURBINE BUILDING
DETAIL**

PID- 1-IA-B20638

REF. DRAWING NO.	REV	TITLE
9763-F-202107	12	TURB BLDG COMP AIR HORS PAID
9763-F-500322-1	13	TURB BLDG IA DISTRIB. PAID
9763-F-500322-2	10	TURB. BLDG. IA DISTR. PID

PID-1-1A-B20639

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. ALL PIPING, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX 1A, UNLESS NOTED OTHERWISE.
 2. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20638, & 20640 THRU 20646.
 3. DENOTES DUAL AIR FILTER.
 4. ALL PIPING, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 5. DELETED
 6. INDICATES REVISION LEVEL
 7. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE. REFER TO VALVE LIST.
 8. INDICATES INSTRUMENTATION DOWNSTREAM OF PIPING ROOT VALVE HAS BEEN VERIFIED. SEE INSTRUMENT AIR DETAIL DRAWING 1-NHY-550007.

14	1/16/06	BCS	JMA	WFO	INCCORP DCR 05-004 DCM-01
13	4/22/05	BCS	GPS	PAL	INCCORP DCR 97-13 DCM-00, 50, DCR 02-016 DCM-12, DCR 02-015 DCM-00
12	2/18/05	BCS	JM	RRB	INCCORP CR 03-00747, 03-00749, 03-06014, 03-04137, 03-06015, 05-01952
11	2/7/05	BCS	JM	PAL	INCCORP DCR 97-13, DCM-124
10	11/1/00	MPW	DWS	STB	INCCORP MMD 99-511 DCM 00 7 06
9	6/18/97	MPW	DWS	GRM	INCCORP MMD 95-550 DCM 01, DCR'S 92-59, 93 & 95-39 CA, 29 & DCM
8	1/31/96	BCS	MPW	RSG	INCCORP MMD 95-570 CA0
7	11/6/92	MRB	BCL	RSG	INCCORP DCR 92-20, CA-06 AND DCR 91-40 CA01
6	11/21/90	WDS	RRC	BEB	INCCORP DCR 90-027 CA02
5	10/12/90	MRB	FCB	ES	INCCORP DCR 87-130 CA0
4	3/31/90	MRB	HP	RRC	INCCORP DCR 90-9 CA0 DELETED NOTE 5
3	12/29/89	MRB	HP	WFO	INCCORP MMD 89-546 CA02 REVISED NOTE 4
2	11/26/86	WDS	WRD	RRC	REMOVED CHANGE ITEM 1 PER ASSEMBLY CONDITION, REMOVED CHG ITEM 2-DETAIL WAS FOR UNIT 2 ONLY, REVISED DRAFTING ERRORS, REINSTATED V-408 PER DR 02/00/96, ADDED CONT DNG REF COORD. & NOTE 5 & 6.
1	6/23/86	CB	VNK	RRC	REVISED PER DR 82/189A
0	4/26/86	CB	JDM	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

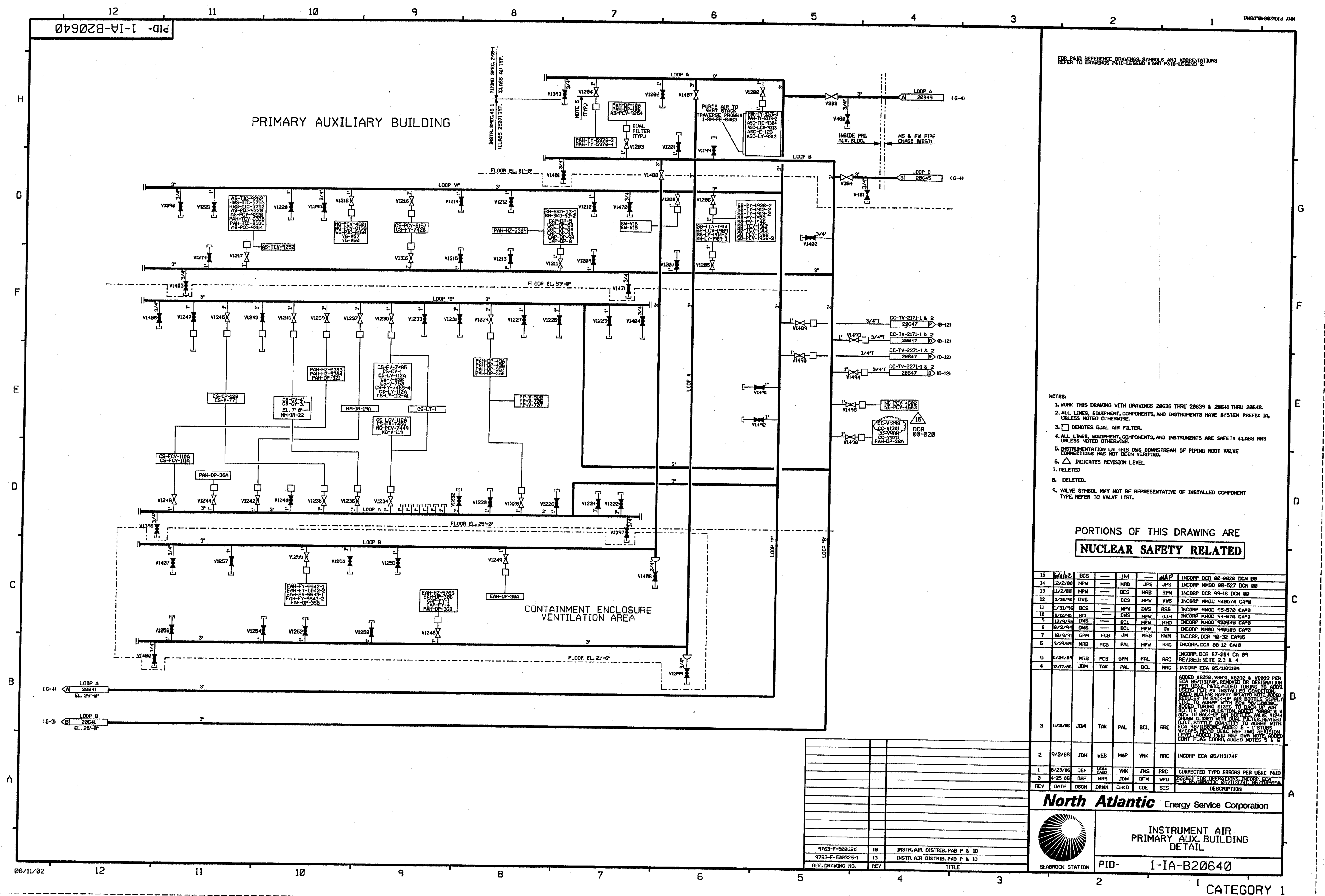
FPL ENERGY Seabrook Station



INSTRUMENT AIR
TURBINE BUILDING
DETAIL

PID- 1-1A-B20639

REF. DRAWING NO.	REV	TITLE
9763-F-202107	12	TURBINE BUILDING COMP AIR HORS P & ID
9763-F-508322-2	10	TURBINE BUILDING IA DISTR. PID.



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.

NOTES:

- 1. WORK THIS DRAWING WITH DRAWINGS 28636 THRU 28639 & 28641 THRU 28646.
- 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
- 3. ☐ DENOTES DUAL AIR FILTER.
- 4. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
- 5. INSTRUMENTATION ON THIS DWG DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED.
- 6. INDICATES REVISION LEVEL.
- 7. DELETED
- 8. DELETED.
- 9. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE. REFER TO VALVE LIST.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

[illegible]

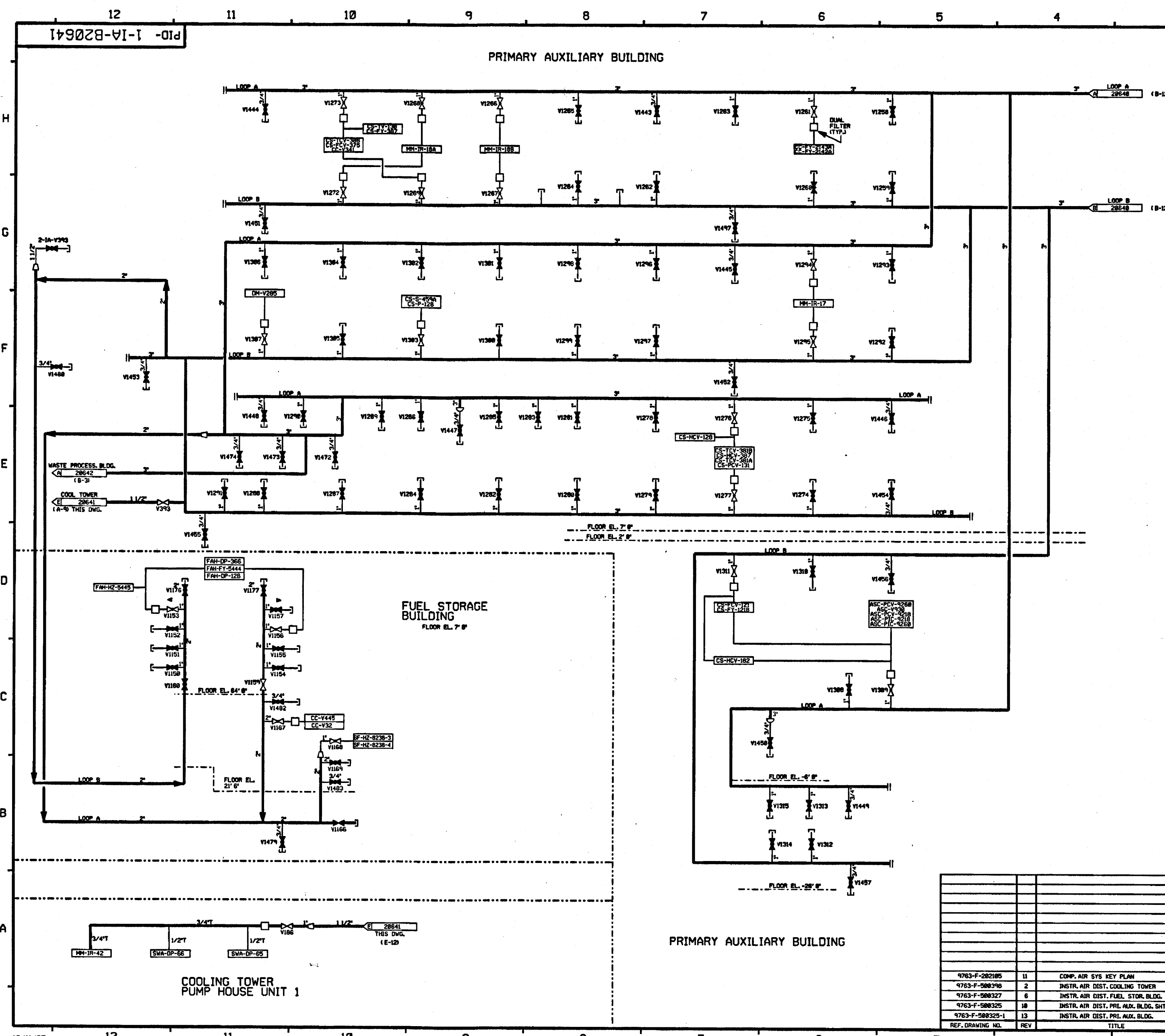
North Atlantic Energy Service Corporation



INSTRUMENT AIR
PRIMARY AUX. BUILDING
DETAIL

PID-	1-IA-B20640
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1 CATEGORY 1



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
- 1. WORK THIS DRAWING WITH DRAWINGS 28638 THRU 28648, & 28642 THRU 28646.
 - 2. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX I.A. UNLESS NOTED OTHERWISE.
 - 3. DENOTES DUAL AIR FILTER.
 - 4. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS N, UNLESS NOTED OTHERWISE.
 - 5. INSTRUMENTATION ON THIS DWG. DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED.
 - 6. INDICATES REVISION LEVEL.
 - 7. DELETED.
 - 8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE. REFER TO VALVE LIST.

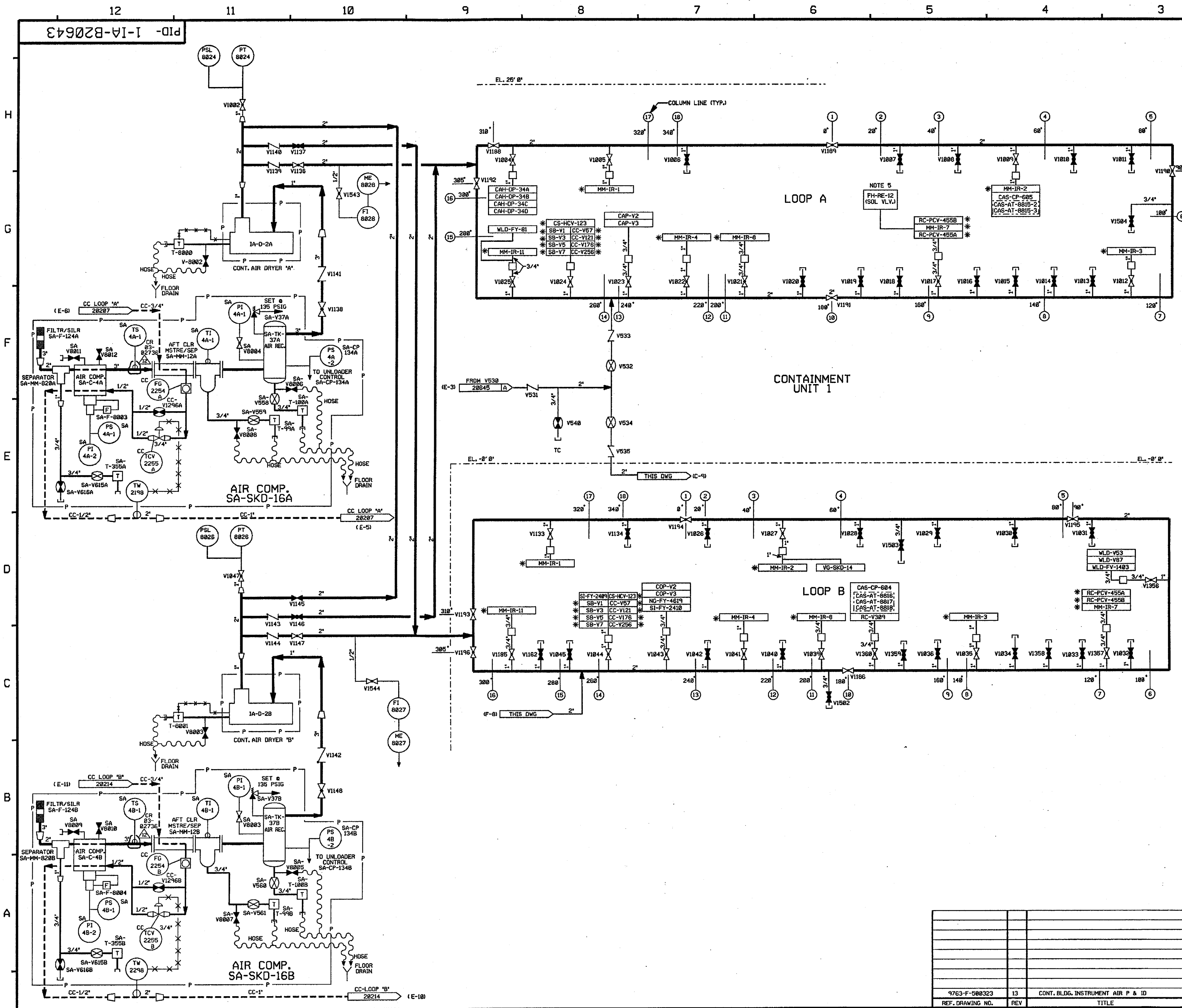
2	11/1/95	BCS	—	MA	DWS	RS	INCORP. MHO 95-578 CA-8
1	11/1/95	MRJ	TAK	WFO	BCL	WNC	ADDED INPLETS AND CAPS PER AS-BUILT. CORRECTED PIPING AND DRAWING. PER LEAD DWS. F-508322 ADDED DUAL FILTER. IN CLS. INSTR. PUMP HOUSE. PER LEAD AND NOTES 5.8.3.7.
0	4/25/96	DSF	MRB	JDM	JNM	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

North Atlantic Energy Service Corporation

**INSTRUMENT AIR
PRIMARY AUX. BUILDING
COOLING TOWER & FUEL STORAGE
DETAIL**

PID- 1-IA-B20641

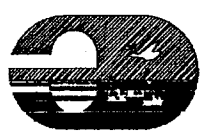
9763-F-202105	11	COMP. AIR SYS KEY PLAN
9763-F-508398	2	INSTR. AIR DIST. COOLING TOWER
9763-F-508327	6	INSTR. AIR DIST. FUEL STOR. BLDG.
9763-F-508325	10	INSTR. AIR DIST. PRI. AUX. BLDG. SHT. 1
9763-F-508325-1	13	INSTR. AIR DIST. PRI. AUX. BLDG.
REF. DRAWING NO.	REV	TITLE



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28636 THRU 28642 & 28645 THRU 28646.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 1A, UNLESS NOTED OTHERWISE.
 3. ASTERISK (*) DENOTES DUAL AIR SUPPLY LOOP A & LOOP B.
 4. [Symbol] DENOTES DUPLEX AIR FILTER.
 5. USE SPARE INSTRUMENT AIR VALVE IN MM-IR-7 TO ACTUATE SOLENOID VALVE DURING REFUELING.
 6. INSTRUMENTATION ON THIS DWG. DOWNSTREAM OF THE PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN FIELD VERIFIED.
 7. [Symbol] - INDICATES REVISION LEVEL.
 8. DELETED
 9. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

12	5/19/83	JM	MMW	BCS	INCORP. CR 03-02736 REV 00
11	6/9/97	MPW	DWS	JPS	INCORP. MM00-91-559 CA-B, DCN 04 & 05 DCR 90-13 DCA 00
10	1/31/96	BCS	MPW	RSG	INCORP. MM00-95-578 CA-B
9	12/9/94	MPW	BCL	MHO	INCORP. MM00-93-545 CA-B
8	6/28/94	MPW	DWS	BAW	INCORP. DCR 91-060 CA-B
7	12/3/92	BCL	MRB	GRM	REINCORP. DCR 90-004 CA-B
6	10/21/92	BCL	MRB	IW	INCORP. DCR 90-004 CA-B
5	7/18/92	MRB	JM	GRM	INCORP. MM00 90-582, CA0
4	1/18/90	MRB	GPH	GRM	INCORP. DCR 88-320 CA10 RE-INCORP. ECA 93/114614A REVISED NOTE 2 DELETED NOTE 8 ADDED: F-8003 & F-8004 PER PP-22430
3	11/6/86	MRJ	WRD	RRC	INCORP. NCR 86/111A REVISED RELIEF VALVE TAG NO. AND ADDED MM-IR-6 PER UAC PAID, REMOVED SKD ORN PIPING CONTINUATION FLAG REF'S PER ECA 93/109966A, REVISED SKD PIPING PER FOREIGN PRINT 28438, ADDED CONTINUATION FLAG CORPS, AND NOTES 6, 7 & 8, ADDED NIPPLE AND CAPS TO SPARE INSTR. VALVES PER AS-BUILT CONDITION.
2	6/27/86	JDM	VNK	RRC	INCORP. ECA 93/114596A
1	4/25/86	JDM	DWS	WFD	RENUMBERED SA V8003-V8008 INCORP. ECA 93/114614A
0	3/4/86	CB	JDM	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

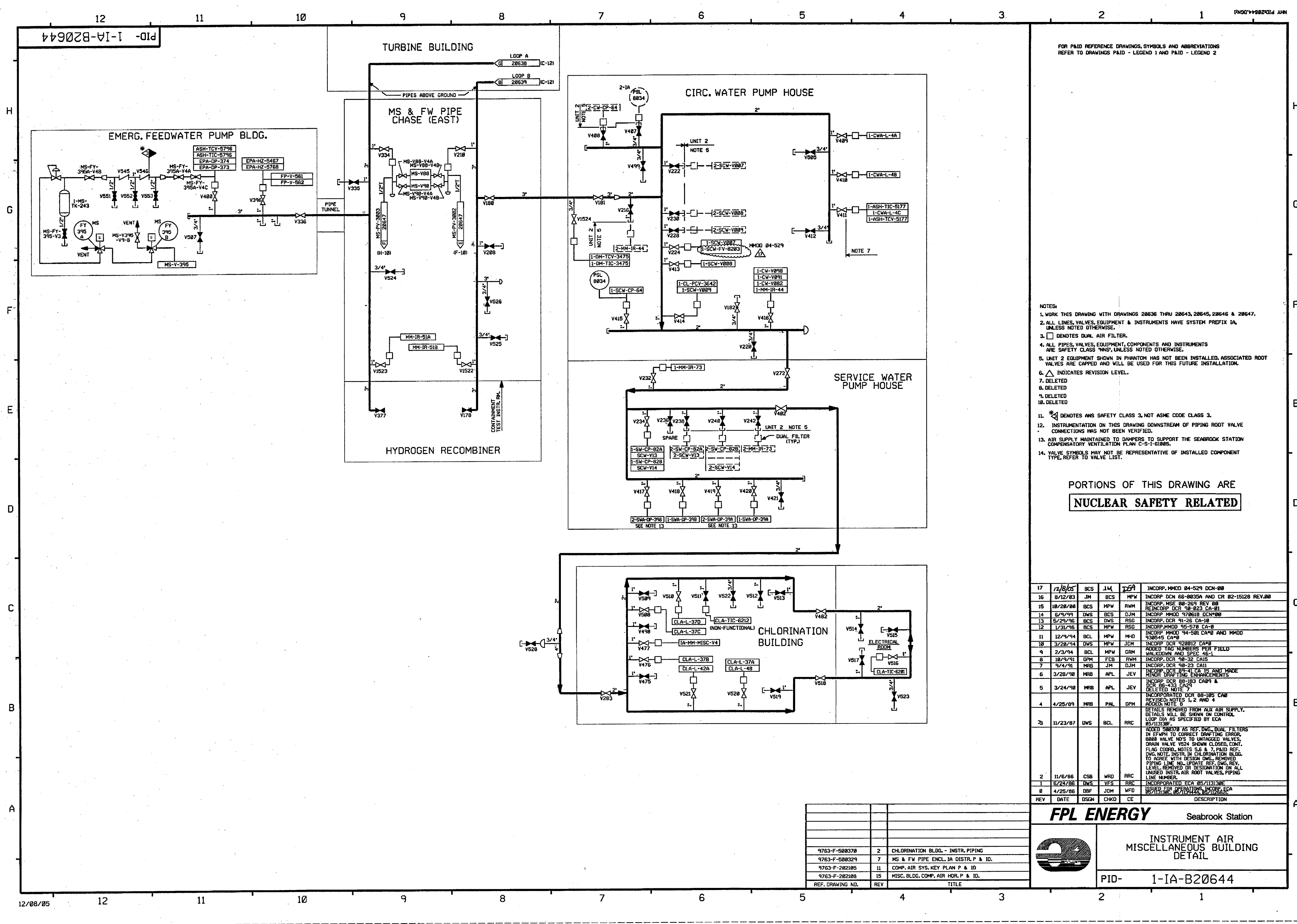
**FPL ENERGY**

Seabrook Station

INSTRUMENT AIR
CONTAINMENT BUILDING
DETAIL

PID- 1-1A-B20643

9763-F-500323	13	CONT. BLDG. INSTRUMENT AIR P & ID
REF. DRAWING NO.	REV	TITLE



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
- 1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20643, 20645, 20646 & 20647.
 - 2. ALL LINES, VALVES, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 - 3. DENOTES DUAL AIR FILTER.
 - 4. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS "MS", UNLESS NOTED OTHERWISE.
 - 5. UNIT 2 EQUIPMENT SHOWN IN PHANTOM HAS NOT BEEN INSTALLED. ASSOCIATED ROOT VALVES ARE CAPPED AND WILL BE USED FOR THIS FUTURE INSTALLATION.
 - 6. INDICATES REVISION LEVEL.
 - 7. DELETED
 - 8. DELETED
 - 9. DELETED
 - 10. DELETED
 - 11. DENOTES AMS SAFETY CLASS 3, NOT ASME CODE CLASS 3.
 - 12. INSTRUMENTATION ON THIS DRAWING DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED.
 - 13. AIR SUPPLY MAINTAINED TO DAMPERS TO SUPPORT THE SEABROOK STATION COMPENSATORY VENTILATION PLAN C-S-1-01805.
 - 14. VALVE SYMBOLS MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

17	12/8/05	BCS	JM	JSA	INCORP. MMD 04-529 DCM-00
16	8/12/03	JM	BCS	MPW	INCORP. DCM 66-0035A AND CR 82-15128 REV.00
15	10/28/00	BCS	MPW	RWH	INCORP. MSE 88-263 REV. 00
14	6/9/99	DWS	BCS	DJM	REINCORP. DCR 90-023 CA-01
13	6/29/96	DWS	RSG	DJM	INCORP. MMD 970518 DCM-00
12	1/31/95	BCS	MPW	RSG	INCORP. DCR 91-26 CA-10
11	12/9/94	BCL	MPW	MHO	INCORP. MMD 95-570 CA-0
10	3/28/94	DWS	MPW	JCM	INCORP. MMD 94-501 CA-0 AND MMD 930545 CA-0
9	2/3/94	BCL	MPW	GRM	INCORP. DCR 920012 CA-0
8	10/9/91	GPM	FCB	RWH	ADDED TAG NUMBERS PER FIELD VALUATION AND SPEC 46-1
7	9/4/91	MRB	JH	DJM	INCORP. DCR 90-32 CA-15
6	3/28/90	MRB	APL	JEV	INCORP. DCR 89-41 CA-15 AND MADE MINOR DRAFTING ENHANCEMENTS
5	3/24/90	MRB	APL	JEV	INCORP. DCR 88-183 CA-09 & INCORPORATED DCR 88-185 CA-0
4	4/25/89	MRB	PAL	GPH	REVISED NOTES 1, 2 AND 4 DELETED NOTE 5
3	11/23/87	DWS	BCL	RRR	DETAILS REMOVED FROM AUX AIR SUPPLY. DETAILS WILL BE SHOWN ON CONTROL LOOP DIA AS SPECIFIED BY ECA 85/113130P.
2	11/6/86	CSB	WRD	RRR	ADDED 500378 AS REF. DWS. DUAL FILTERS IN EPMPH TO CORRECT DRAFTING ERROR. 8000 VALVE NO'S TO UNTAGGED VALVES. DRAIN VALVE V524 SHOWN CLOSED. CONT. FLAG COORD. NOTES 5, 6 & 7, P&ID REF. DWS. NOTE INSTR. IN CHLORINATION BLDG. TO AGREE WITH DESIGN DWS. REMOVED PIPING LINE NO. UPDATE REF. DWS. REV. LEVEL REMOVED OR DESIGNATION ON ALL UNUSED INSTR. AIR ROOT VALVES. PIPING LINE NUMBER.
1	6/24/86	DWS	YES	RRR	INCORPORATED ECA 05/113130P.
0	4/25/86	DBF	JDM	WFD	ISSUED FOR OPERATIONS. INCORP. ECA 05/113130P. 05/113440L 05/112660L
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station

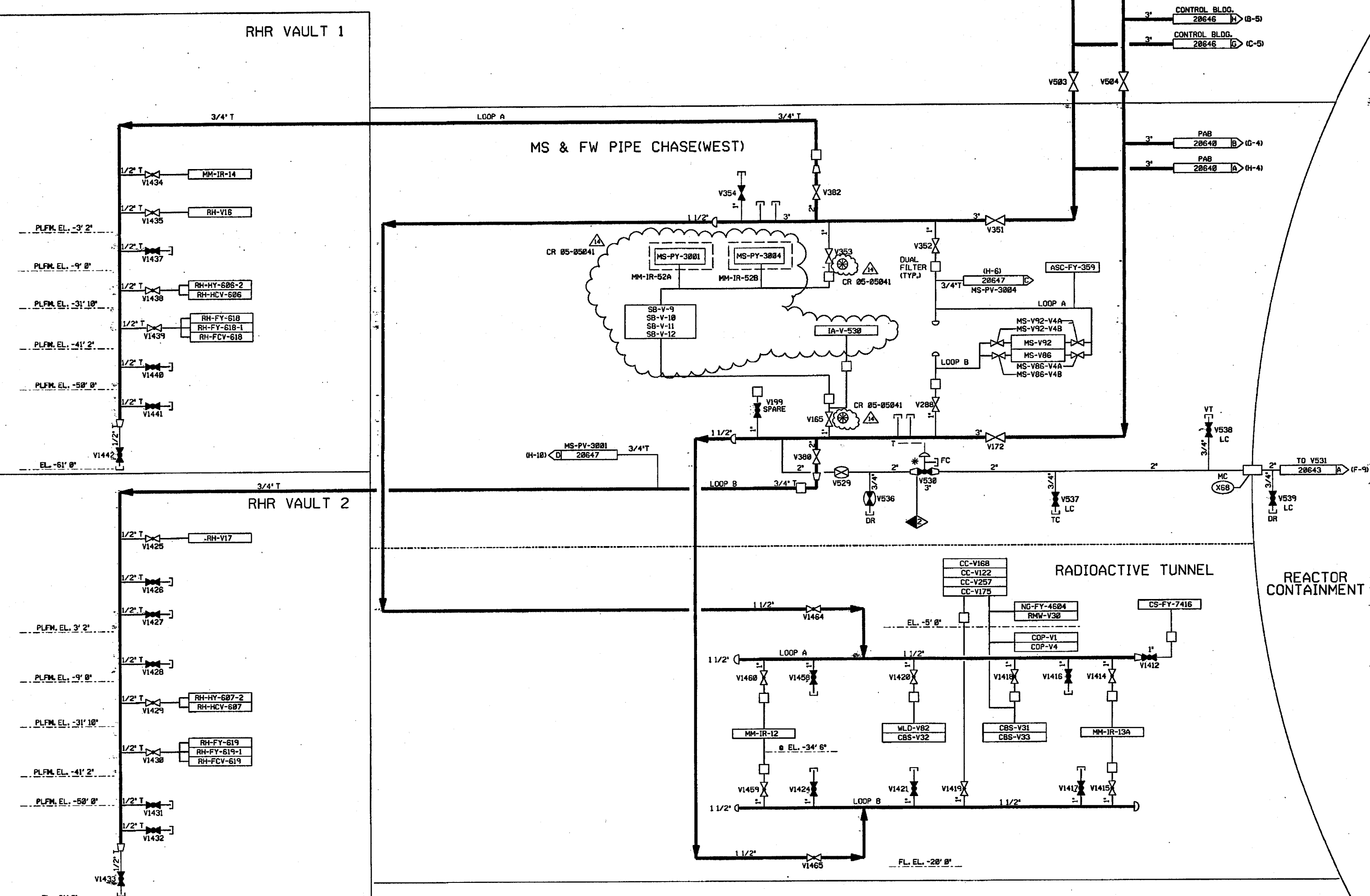
**INSTRUMENT AIR
MISCELLANEOUS BUILDING
DETAIL**

PID- 1-IA-B20644

9763-F-508370	2	CHLORINATION BLDG. - INSTR. PIPING
9763-F-508329	7	MS & FW PIPE ENCL. IA DISTR. P & ID.
9763-F-202185	11	COMP. AIR SYS. KEY PLAN P & ID.
9763-F-202108	15	MISC. BLDG. COMP. AIR HOR. P & ID.
REF. DRAWING NO.	REV	TITLE

P101-1-IA-B20645


FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20644, 20646 & 20647.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 3. DENOTES DUAL AIR FILTER.
 4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 5. INSTRUMENTATION ON THIS DRAWING DOWNSTREAM OF PIPING ROOT VALVE CONNECTIONS HAS NOT BEEN VERIFIED UNLESS NOTED BY . REFER TO DWG 1-NHY-550013 FOR VERIFIED INSTRUMENT DETAILS.
 6. INDICATES REVISION LEVEL.
 7. * INDICATES VALVES SUPPLIED BY WESTINGHOUSE. CR 05-05041
 8. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-885111, UNLESS NOTED OTHERWISE.
 9. DELETED
 10. DELETED
 11. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

14	1/25/06	BCS	JM	TJM	REINCORP CR 05-05041 REV.0
13	6/7/05	BCS	JM	RRB	INCORP CR 05-05041 REV.0
12	1/31/96	BCS	MPW	RSG	INCORP MM00 95-570 CA0
11	5/12/95	BCL	DWS	DJM	INCORP MM00 94-570 CA0
10	12/4/94	BCL	MPW	MMD	REINCORP DCR 900004 CA*0 AND INCORP MM00 930545 CA*0
9	7/18/94	MPW	BCL	JCM	INCORP DCR 85-420 CA 0 AND REINCORP. DCR 90-004 CA 0
8	2/2/94	BCL	MRS	GRM	ADDED TAG NUMBERS PER FIELD WALKDOWN AND SPEC 46-1
7	4/5/93	MRB	BCL	JM	INCORP MM00 92-553 CA0
6	10/21/91	MRB	BCL	IW	INCORP DCR 90-004 CA0
5	10/9/91	MRB	FCB	RWM	INCORP DCR 90-32 CA0
4	8/18/90	MRB	GPM	GRM	REVISED NOTE 4 PER ENG DSGN STD. 31788 SEC. 3.8.
3	11/23/87	DWS	BCL	RRC	DETAILS REMOVED FROM AUX AIR SUPPLY, DETAILS WILL BE SHOWN ON CONTROL LOOP DIAG AS SPECIFIED BY ECA 05-113130F.
2	11/14/86	MRJ	PAL	RRC	ADDED NOTE 6 & CHANGED NOTE 5. ADDED CONT FLAG COORDS, V8834 THRU V8841, NIPPLES & CAPS, ABANDONED CONN'S, ADDITIONAL DUAL FILTERS AND AIR USERS, REVISED LOC OF TAKE-OFFS & TUBING SIZES PER AS-INSTALLED CONDITIONS. INCORP ECA 05/113130F & 74/107155A. CORRECTED DRAFTING ERRORS.
1	6/23/86	DBF	VNK	RRC	INCORPORATED ECA 05/113130F
0	4/25/86	DBF	JDM	WFO	ISSUED FOR OPERATIONS INCORP ECA 05/113130F & 74/107155A
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

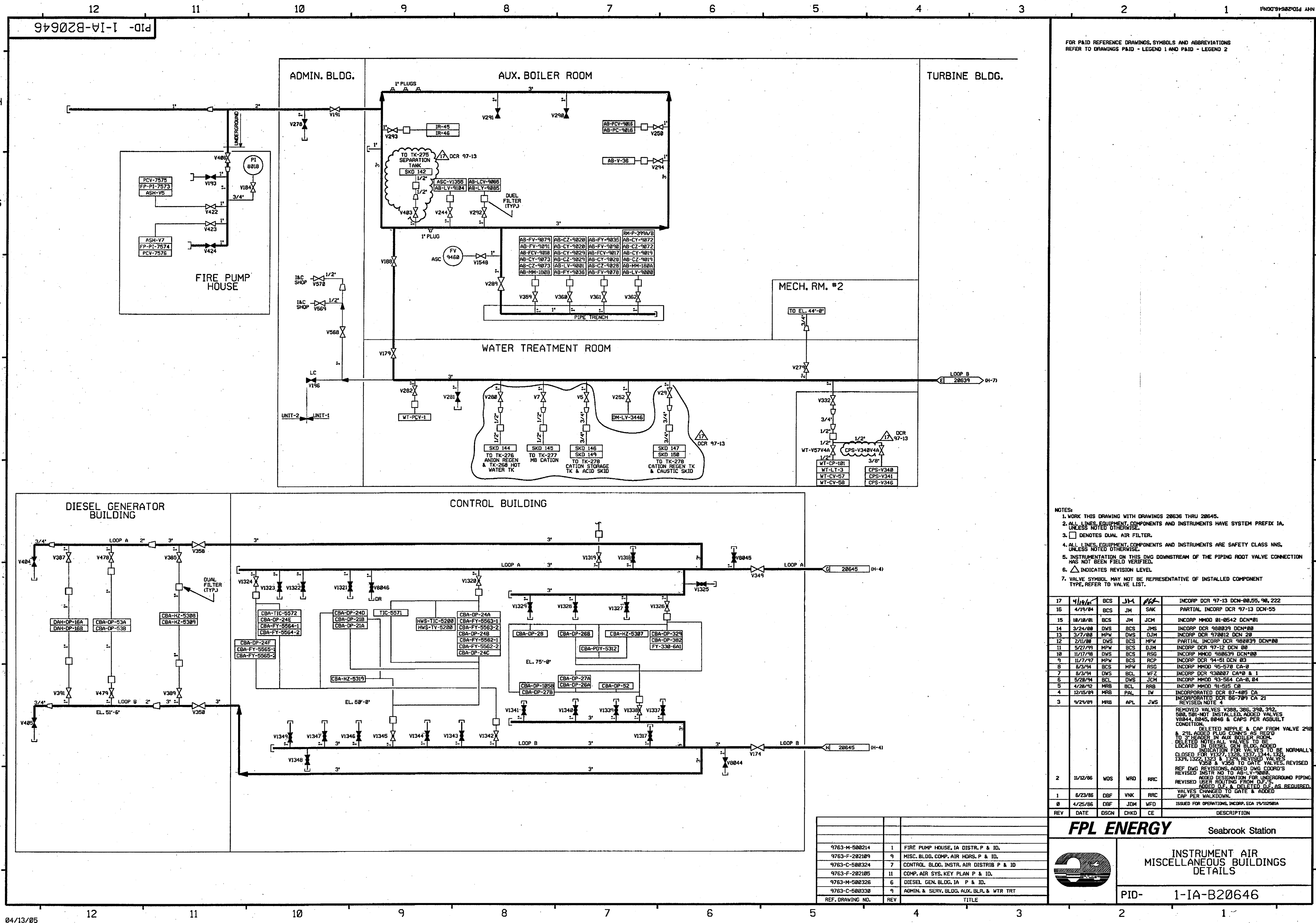
REF. DRAWING NO.	REV	TITLE
9763-F-202105	11	COMP AIR SYS KEY PLAN P & ID
9763-F-500335	4	RHR VAULTS 1A DISTRIB P & ID
9763-F-500379	4	RADIOACTIVE TUNNEL 1A DISTRIB P & ID
9763-F-500329	7	MS & FW PIPE CHASE 1A DISTRIB P & ID
9763-F-202100	15	MISC BLDGS COMP AIR HEADERS P & ID

**FPL ENERGY**

Seabrook Station

INSTRUMENT AIR
MISCELLANEOUS BUILDING
DETAILS

P101-1-IA-B20645



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20645.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 3. DENOTES DUAL AIR FILTER.
 4. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 5. INSTRUMENTATION ON THIS DWG DOWNSTREAM OF THE PIPING ROOT VALVE CONNECTION HAS NOT BEEN FIELD VERIFIED.
 6. INDICATES REVISION LEVEL.
 7. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

17	4/18/84	BCS	JM	SAK	INCORP DCR 97-13 DCM-88-55, 98, 222
16	4/19/84	BCS	JM	SAK	PARTIAL INCORP DCR 97-13 DCM-55
15	10/18/01	BCS	JM	JCM	INCORP MMD 01-05-42 DCM-01
14	3/24/00	DWS	BCS	JMS	INCORP DCR 980839 DCM-08
13	3/7/00	MPW	DWS	DJM	INCORP DCR 970012 DCM 28
12	2/10/00	DWS	BCS	MPW	PARTIAL INCORP DCR 980839 DCM-08
11	5/27/99	MPW	BCS	DJM	INCORP DCR 97-12 DCM 08
10	11/17/98	DWS	BCS	RSG	INCORP MMD 980639 DCM-08
9	11/7/97	MPW	BCS	RCF	INCORP DCR 94-51 DCM 03
8	8/3/94	BCS	MPW	RSG	INCORP MMD 95-570 CA-0
7	8/3/94	DWS	BCL	WFZ	INCORP DCR 930807 CA-0 & 1
6	5/28/94	BCL	DWS	JCH	INCORP MMD 93-564 CA-0, 84
5	4/28/92	MRB	BCL	RBS	INCORP MMD 91-515 CA
4	12/15/89	MRB	PAL	IW	INCORPORATED DCR 87-485 CA
3	9/21/89	HRB	APL	JWS	INCORPORATED DCR 86-789 CA 21 REVISED NOTE 4
2	11/12/86	WDS	WRD	RRC	REMOVED VALVES V388, 386, 390, 392, 588, 581 NOT INSTALLED. ADDED VALVES V844, 8845, 8846 & CAPS PER ASDULTY CONDITION. DELETED NIPPLE & CAP FROM VALVE 298 TO 3\"
1	6/23/86	DBF	VNK	RRC	INDICATION FOR VALVES TO BE NORMALLY CLOSED FOR V1327, 1328, 1337, 1344, 1351, 1352, 1353 & 1354. REVISED VALVES V358 & V359 TO GATE VALVES. REVISED REF DWG REVISIONS, ADDED DWG COORD'S REVISED INSTR NO TO AS-LV-98088. ADDED D.F. DELETED D.E. AS REQUIRED. VALVES CHANGED TO GATE & ADDED CAP PER WALKDOWN.
0	4/25/86	DBF	JDM	WFO	ISSUED FOR OPERATIONS, INCORP. ECA 19/12/86A
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY Seabrook Station

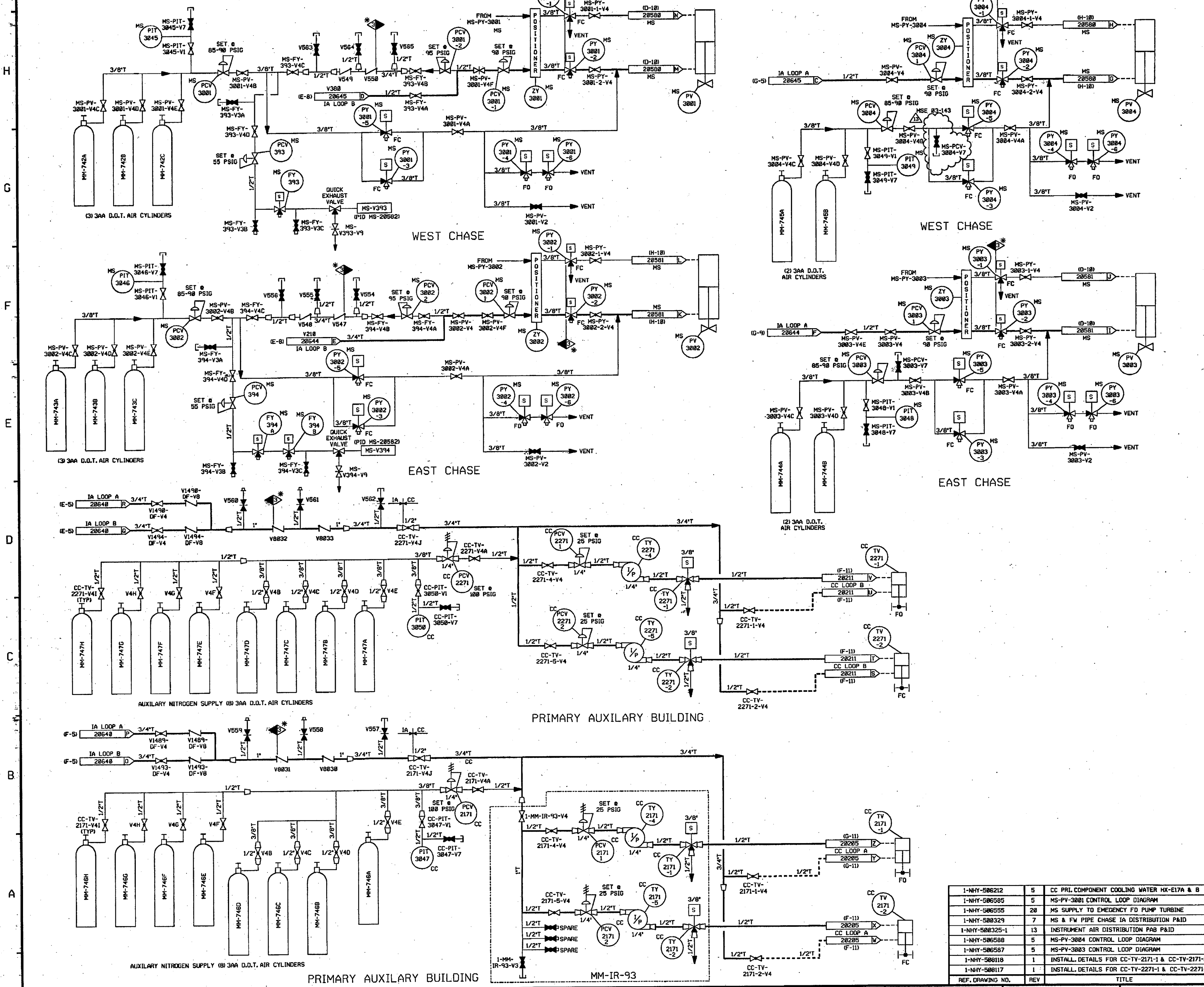
INSTRUMENT AIR
MISCELLANEOUS BUILDINGS
DETAILS

PID- 1-IA-B20646

REF. DRAWING NO.	REV	TITLE
9763-M-500214	1	FIRE PUMP HOUSE, IA DISTR. P & ID.
9763-F-202109	9	MISC. BLDG. COMP. AIR HORS. P & ID.
9763-C-500324	7	CONTROL BLDG. INSTR. AIR DISTRIB P & ID
9763-F-202105	11	COMP. AIR SYS. KEY PLAN P & ID.
9763-M-500326	6	DIESEL GEN. BLDG. IA P & ID.
9763-C-500338	9	ADMIN. & SERV. BLDG. AUX. BLR. & WTR TRT

PID-1-1A-B20647

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWING P&ID-LEGEND 1 AND P&ID-LEGEND 2



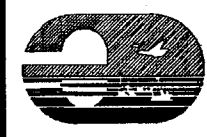
- NOTES:
1. ALL LINES, VALVES, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX IA, UNLESS NOTED OTHERWISE.
 2. ALL PIPES, VALVES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS "NS", UNLESS NOTED OTHERWISE.
 3. WORK THIS DRAWING WITH DRAWINGS 20636 THRU 20646.
 4. * DENOTES ANS SAFETY CLASS 3, NOT ASME CODE CLASS 3.
 5. Δ INDICATES REVISION LEVEL.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
13	2-21-93	BCS	JMA	FEB	INCOMP. MSE 03-143 REV 00
12	12/21/95	JM	BCS	JC	INCOMP. CR 05-13408 REV 00
11	9/16/94	BCS	JM	MRJ	PARTIAL INCOMP. MSE 03-143 REV 00
10	10/11/93	MPW	MAP	RRB	INCOMP. MSE 02-296 REV 00
9	11/15/92	JM	BCS	RRB	INCOMP. CR 01-10700 REV 00 & CR 02-08438 REV 00
8	6/27/92	BCS	MPW	PEB	INCOMP. DCR 01-017 DCR 07
7	5/25/92	MPW	BCS	RRB	INCOMP. DCR 01-017 DCR 06
6	5/14/92	MPW	JM	MAP	INCOMP. DCR 01-017 DCR 00
5	5/15/91	BCS	MPW	RPV	INCOMP. MMOD 99-510 DCR 00 & 01
4	6/02/90	DRL	BCS	JWS	INCOMP. MMOD 99-550 CA 01 & 02
3	6/20/97	MPW	DWS	BAW	INCOMP. MMOD 96-550 CA 01 & DCR 97-004 DCR 00
2	10/30/96	MPW	BCS	VWS	INCOMP. MMOD 96-550 CA 0
1	11/13/95	BCL	MPW	RMW	INCOMP. DCR 94-029 CA 6
0	11/29/94	MPW	MHD		ISSUED FOR OPERATIONS, MMOD 93-545 CA 0

FPL ENERGY

Seabrook Station

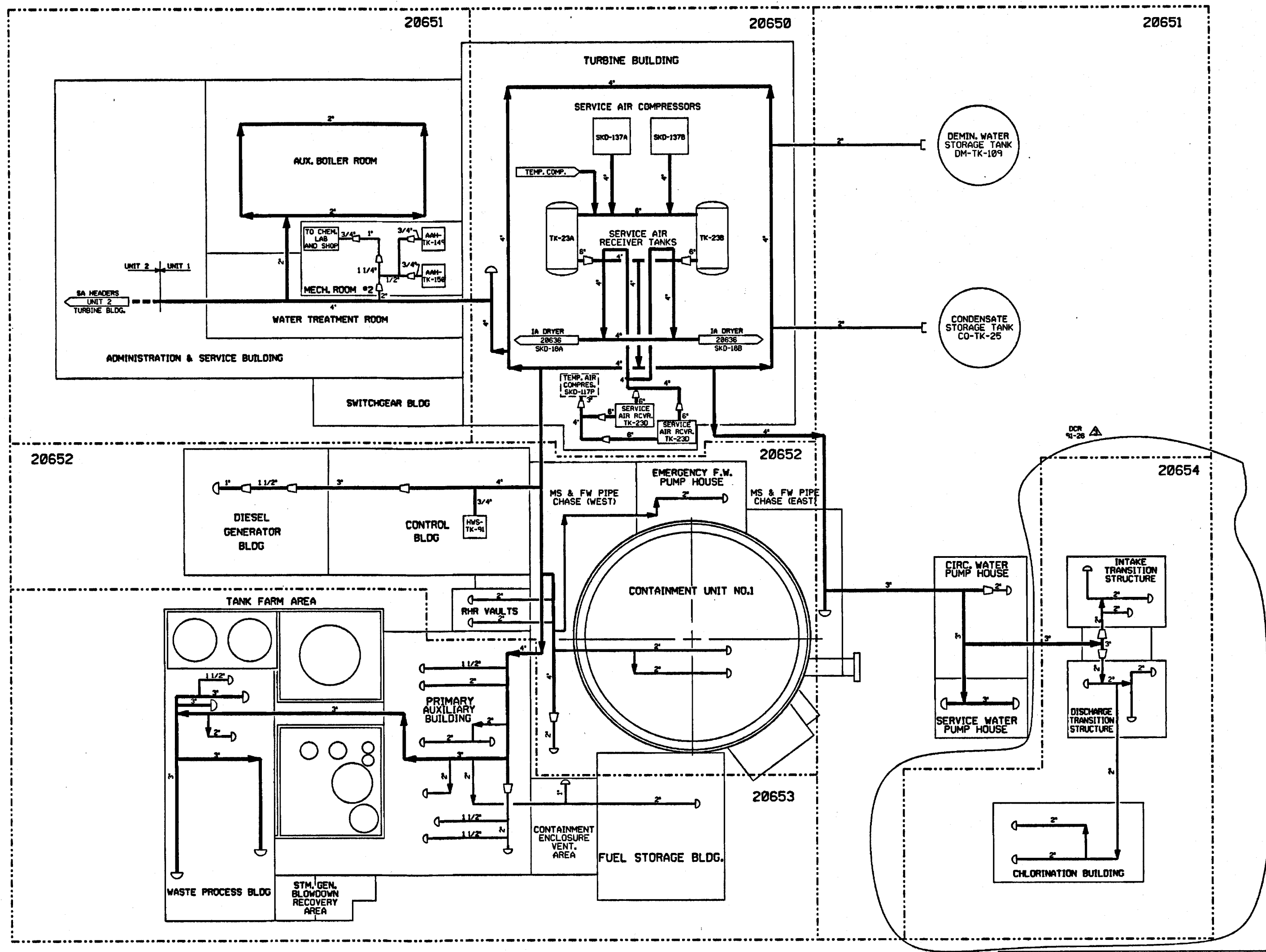


INSTRUMENT AIR
BOTTLE SUPPLY

PID- 1-1A-B20647

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
1-NHY-506212	5	CC PRL COMPONENT COOLING WATER HX-E17A & B			
1-NHY-506585	5	MS-PV-3001 CONTROL LOOP DIAGRAM			
1-NHY-506595	20	MS SUPPLY TO EMERGENCY FD PUMP TURBINE			
1-NHY-500329	7	MS & FW PIPE CHASE IA DISTRIBUTION P&ID			
1-NHY-500325-1	13	INSTRUMENT AIR DISTRIBUTION P&ID			
1-NHY-506588	5	MS-PV-3004 CONTROL LOOP DIAGRAM			
1-NHY-506587	5	MS-PV-3003 CONTROL LOOP DIAGRAM			
1-NHY-500118	1	INSTALL. DETAILS FOR CC-TV-2171-1 & CC-TV-2171-2			
1-NHY-500117	1	INSTALL. DETAILS FOR CC-TV-2271-1 & CC-TV-2271-2			

PID-1-SA-B20649



NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20650, 20651, 20652, 20653 & 20654
2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
3. Δ INDICATES REVISION LEVEL.

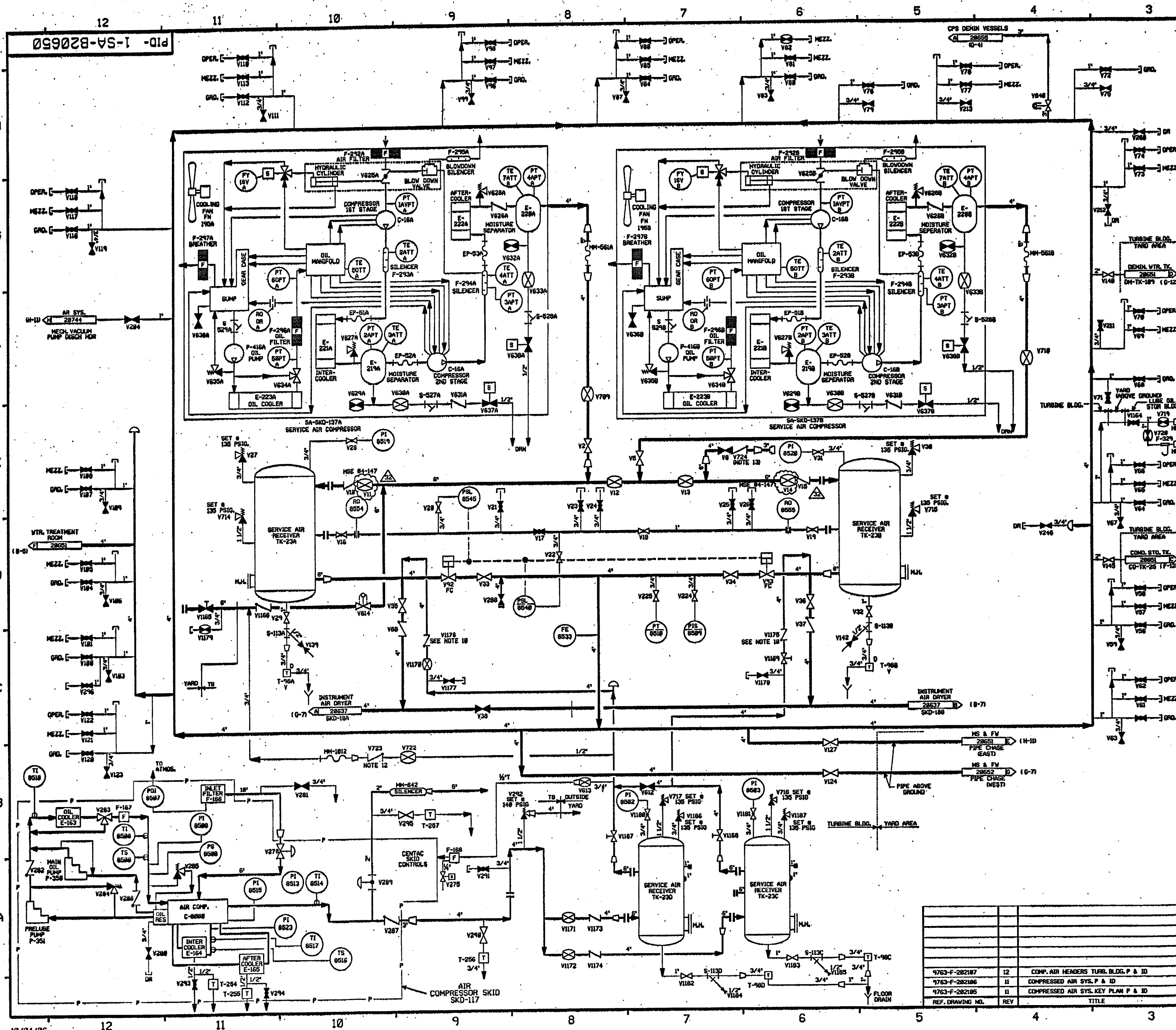
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
3	1/28/87	BCS	---	DWS	MPW	ESG	INCCORP DCR 91-26 CA-81
2	3/24/84	DWS	---	BCL	MPW	WJZ	INCCORP DCR 930016 CA#8 & 1
1	1/28/87	MOS	OPD	MPD	BCL	RRC	REVISED REF. DNG. REVISIONS ADDED
0	3/21/86	TAK	MRB	JDM	DFH	WFD	NOTE 3. REVISED PER LATEST SYS. DWGS.
0							ISSUED FOR OPERATIONS

North Atlantic Energy Service Corporation

SERVICE AIR SYSTEM OVERVIEW

PID- 1-SA-B20649





FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

NOTES:

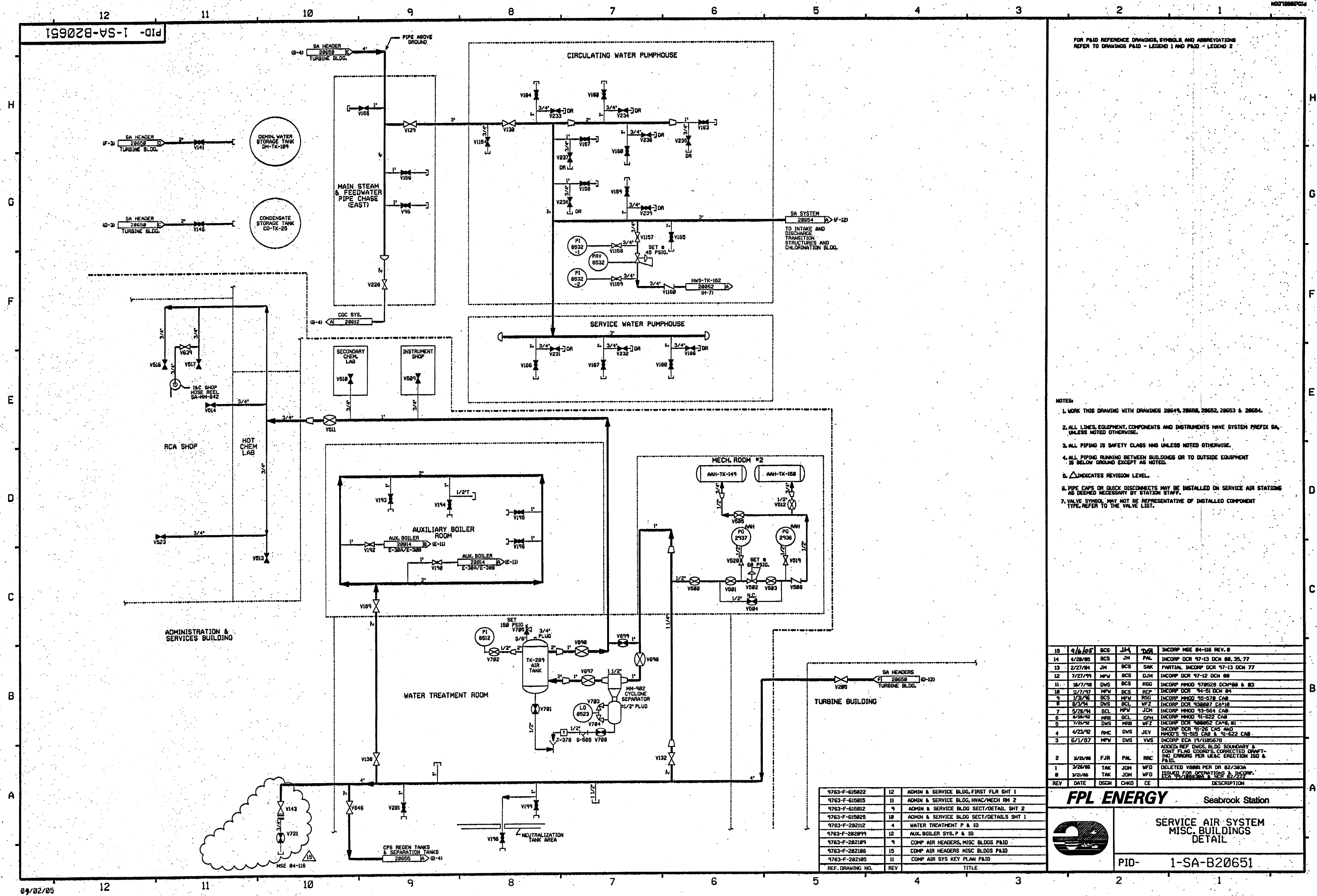
- WORK THIS DRAWING WITH DRAWINGS 20644, 20652, 20653 & 20655.
- ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
- ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS 1MS UNLESS NOTED OTHERWISE.
- INSTRUMENT REFERENCES:
 - (A) TO SCC-V125, FY-7088 (DMS, SCC-20670)
 - (B) TO SCC-V124, FY-7082 (DMS, SCC-20670)
 - (C) TO SCC-V132, FY-7082 (DMS, SCC-20670)
- ALL PIPING RUNNING BETWEEN BUILDINGS OR TO OUTSIDE EQUIPMENT IS BELOW GROUND EXCEPT AS NOTED.
- △ INDICATES REVISION LEVEL.
- DELETED
- PIPE CAPS OR QUICK DISCONNECTS MAY BE INSTALLED ON SERVICE AIR STATIONS AS ORDERED NECESSARY BY STATION STAFF.
- DELETED
- INTERVALS OF CHECK VALVES, SA-V1175 & V1176 HAVE BEEN REMOVED.
- VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.
- EXCESS FLOW CHECK VALVE, SA-V-723 SEATS IF FLOW EXCEEDS 120 SCFH @ 100 PSIG INLET PRESSURE.
- CHECK VALVE HAS 0.250" HOLE IN DISC TO SUPPORT AUTO START OF PORTABLE COMPRESSOR.

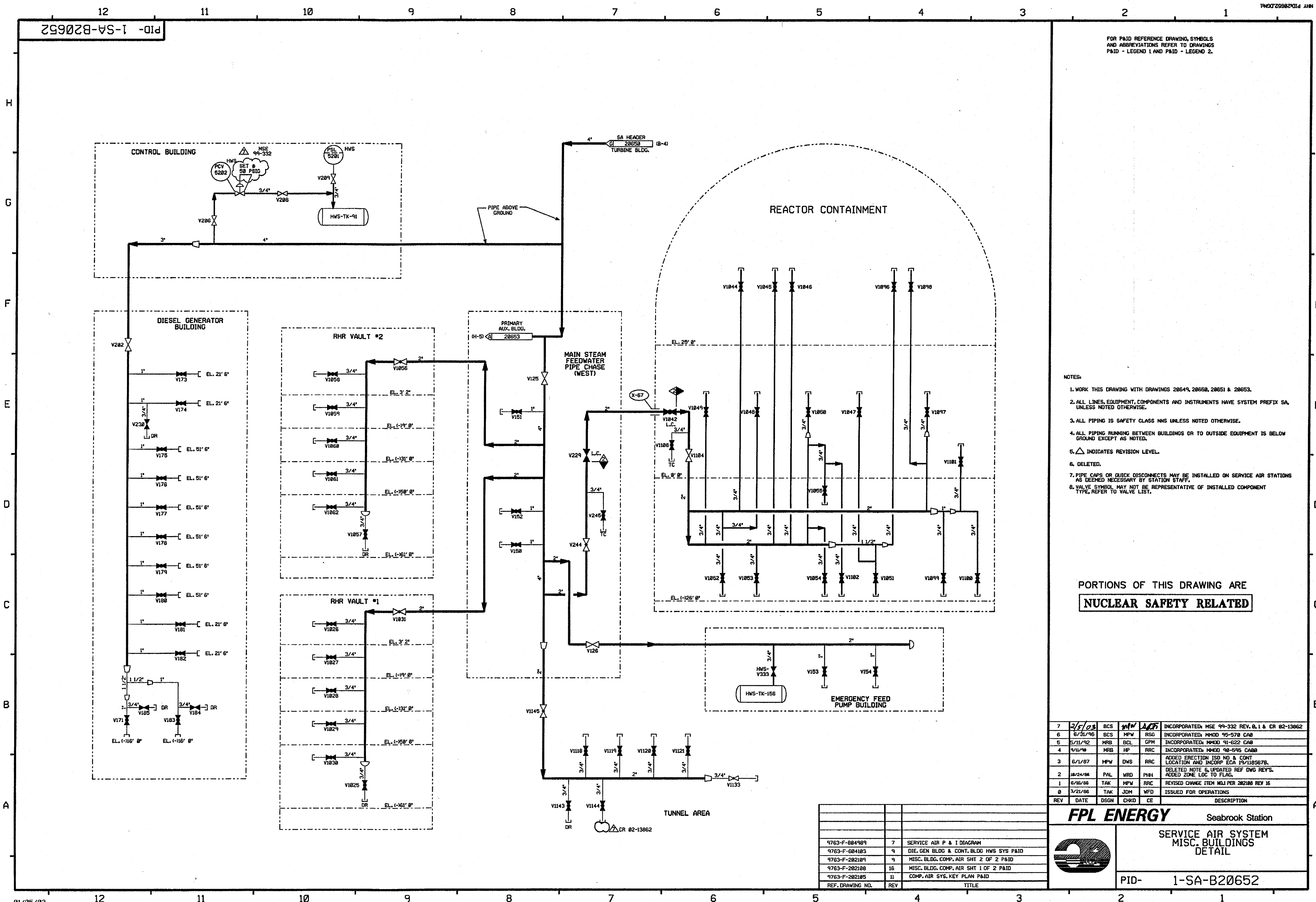
REV	DATE	DSGN	CHKD	CE	DESCRIPTION
32	10-1-84	BCS	JM	SEA	PARTIAL INCORP. MHO 04-147 DCH 88
31	7/27/84	BCS	JM	SEA	INCORP. MHO 06-046 DCH 88
30	12/15/83	JM	BCS	SEA	INCORP. MHO 05-028 DCH 88
29	11/17/83	JM	BCS	SEA	PARTIAL INCORP. MHO 04-147 REV 83
28	10/15/83	BCS	JM	SEA	INCORP. MHO 05-031 REV 88
27	10/15/83	BCS	JM	SEA	INCORP. MHO 05-135 REV 88 & REMOVED INCOMPLETE ITEM 1 PER SA OF PROC. 0018-43.01 8/83
26	2/27/84	JM	BCS	SEA	INCORP. DCR-97-13 DCH 88, SA MHO 95-578 DCH 88, PARTIAL INCORP. MHO 04-147 REV 88
25	11/3/83	JM	BCS	SEA	INCORP. MHO 03-028 REV 88
24	8/15/83	MPV	JM	JOC	INCORP. MHO 01-537 DCH 88
23	7/14/83	BCS	JM	JOC	PARTIAL INCORP. MHO 01-537 DCH 88
22	6/17/83	MPV	JM	JC	PARTIAL INCORP. MHO 01-537 DCH 88
21	12/15/82	BCS	JM	SEA	INCORP. MHO 02-028 REV 88
20	5/29/82	BCS	MPV	SEA	INCORP. MHO 08-0247 REV 88, CR 01-0347
19	1/15/82	BCS	MPV	JCH	INCORP. MHO 79-026 DCH 88
18	8/22/80	BCS	DMS	JCH	PARTIAL INCORP. MHO 79-026 DCH 88
17	1/28/77	BCS	DMS	RMB	INCORP. MHO 95-552 CA-8
16	1/31/76	BCS	MPV	RSG	INCORP. MHO 95-578 CA-8
15	9/14/75	BCL	MPV	JCH	INCORP. MHO 95-552 CA-8
14	1/17/75	BCL	DMS	WZ	INCORP. DCR 93-16 CA-21
13	3/24/73	MRB	BCL	WZ	INCORP. DCR 93-16 CA-21
12	3/24/73	BCL	MRB	JCH	REINCORP. DCR-93-16 CA-8
11	2/12/73	BCL	MRB	JCH	INCORP. DCR-93-16 CA-8
10	1/25/73	BCL	MRB	JCH	PARTIAL INCORP. DCR-93-16 CA-8
9	5/11/72	MRB	BCL	GRH	INCORP. MHO 90-582 CAB8
8	7/18/71	MRB	JM	GRH	INCORP. MHO 90-582 CAB8
7	11/7/66	GPH	MRB	RHC	INCORP. ECA 74/113738
6	8/26/67	MPV	BCL	RHC	REVISION NOTE 3 ADDED TO THE 0000, 0001 & 0002 PER PP 2844, 1204 PER LE & C P & 10 2000, NOTE 9 & INCOMPLETE ITEM 1, CHANGED VALVES V203, V204 & V201 FROM GATE TO GLOBE VALVES PER ECA 99/117257, VALVE TAGS V203, V204 & V201 FROM GATE TO GLOBE VALVES AND CORRECTED VALVE TAG NO. PER ECA 99/117257.
5	6/1/67	MPV	DMS	VMS	INCORP. ECA 19/118578
4	3/2/66	TAK	JDM	WFD	ISSUED FOR OPERATIONS
3					INCORP. ECA 72/118178
2					
1					

FPL ENERGY Seabrook Station

SERVICE AIR SYSTEM TURBINE BUILDING DETAIL

PID- 1-SA-B20650



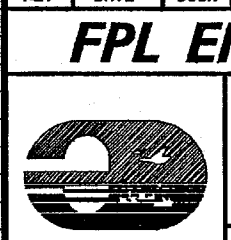


FOR P&ID REFERENCE DRAWING, SYMBOLS
AND ABBREVIATIONS REFER TO DRAWINGS
P&ID - LEGEND 1 AND P&ID - LEGEND 2.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20649, 20650, 20651 & 20653.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
 3. ALL PIPING IS SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
 4. ALL PIPING RUNNING BETWEEN BUILDINGS OR TO OUTSIDE EQUIPMENT IS BELOW GROUND EXCEPT AS NOTED.
 5. Δ INDICATES REVISION LEVEL.
 6. DELETED.
 7. PIPE CAPS OR QUICK DISCONNECTS MAY BE INSTALLED ON SERVICE AIR STATIONS AS DEEMED NECESSARY BY STATION STAFF.
 8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

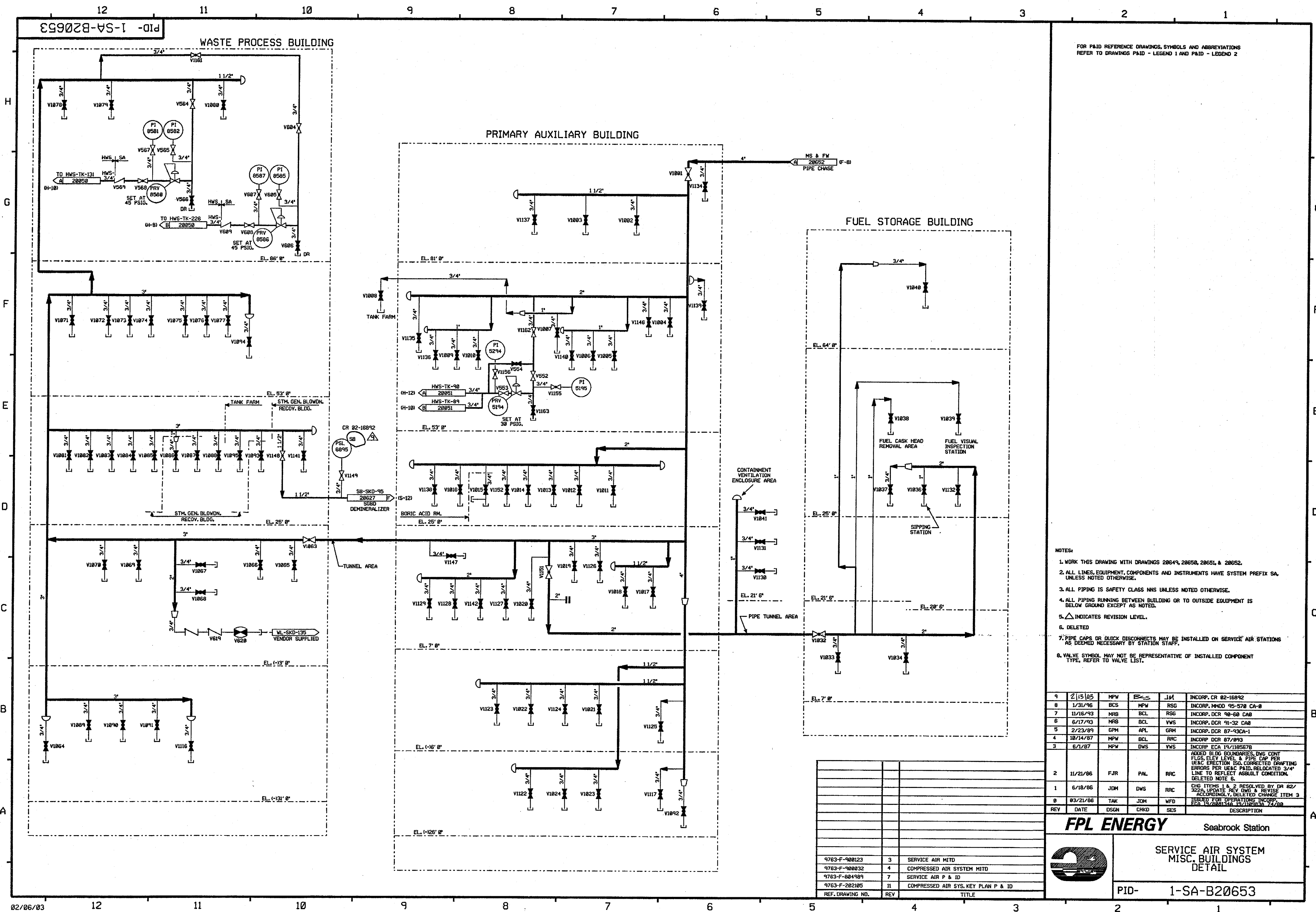
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

7	2/5/03	BCS	MPW	AS	INCORPORATED: MSE 99-332 REV. 0, 1 & CR 02-13862
6	6/31/96	BCS	MPW	RSG	INCORPORATED: MM00 95-570 CA0
5	5/11/92	MRB	BCL	GPM	INCORPORATED: MM00 91-622 CA0
4	9/11/90	MRB	HP	RRC	INCORPORATED: MM00 90-595 CA00
3	6/1/87	MPW	DWS	RRC	ADDED ERECTION ISD NO. & CONT LOCATION AND INCOMP. ECR 19/1185678.
2	10/24/86	PAL	WRD	PHH	DELETED NOTE 6, UPDATED REF DWG REV'S.
1	6/16/86	TAK	MPW	RRC	REVISED CHANGE ITEM MLI PER 202108 REV 16
0	3/21/86	TAK	JOM	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION



FPL ENERGY Seabrook Station
SERVICE AIR SYSTEM
MISC. BUILDINGS
DETAIL
PID- 1-SA-B20652

REF. DRAWING NO.	REV	TITLE
9763-F-884989	7	SERVICE AIR P & I DIAGRAM
9763-F-884103	9	DIE. GEN BLDG & CONT. BLDG HWS SYS P&ID
9763-F-202104	9	MISC. BLDG. COMP. AIR SHT 2 OF 2 P&ID
9763-F-202108	16	MISC. BLDG. COMP. AIR SHT 1 OF 2 P&ID
9763-F-202105	11	COMP. AIR SYS. KEY PLAN P&ID




FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20649, 20650, 20651, & 20652.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SA, UNLESS NOTED OTHERWISE.
 3. ALL PIPING IS SAFETY CLASS NMS UNLESS NOTED OTHERWISE.
 4. ALL PIPING RUNNING BETWEEN BUILDING OR TO OUTSIDE EQUIPMENT IS BELOW GROUND EXCEPT AS NOTED.
 5. Δ INDICATES REVISION LEVEL.
 6. DELETED
 7. PIPE CAPS OR QUICK DISCONNECTS MAY BE INSTALLED ON SERVICE AIR STATIONS AS DEEMED NECESSARY BY STATION STAFF.
 8. VALVE SYMBOL MAY NOT BE REPRESENTATIVE OF INSTALLED COMPONENT TYPE, REFER TO VALVE LIST.

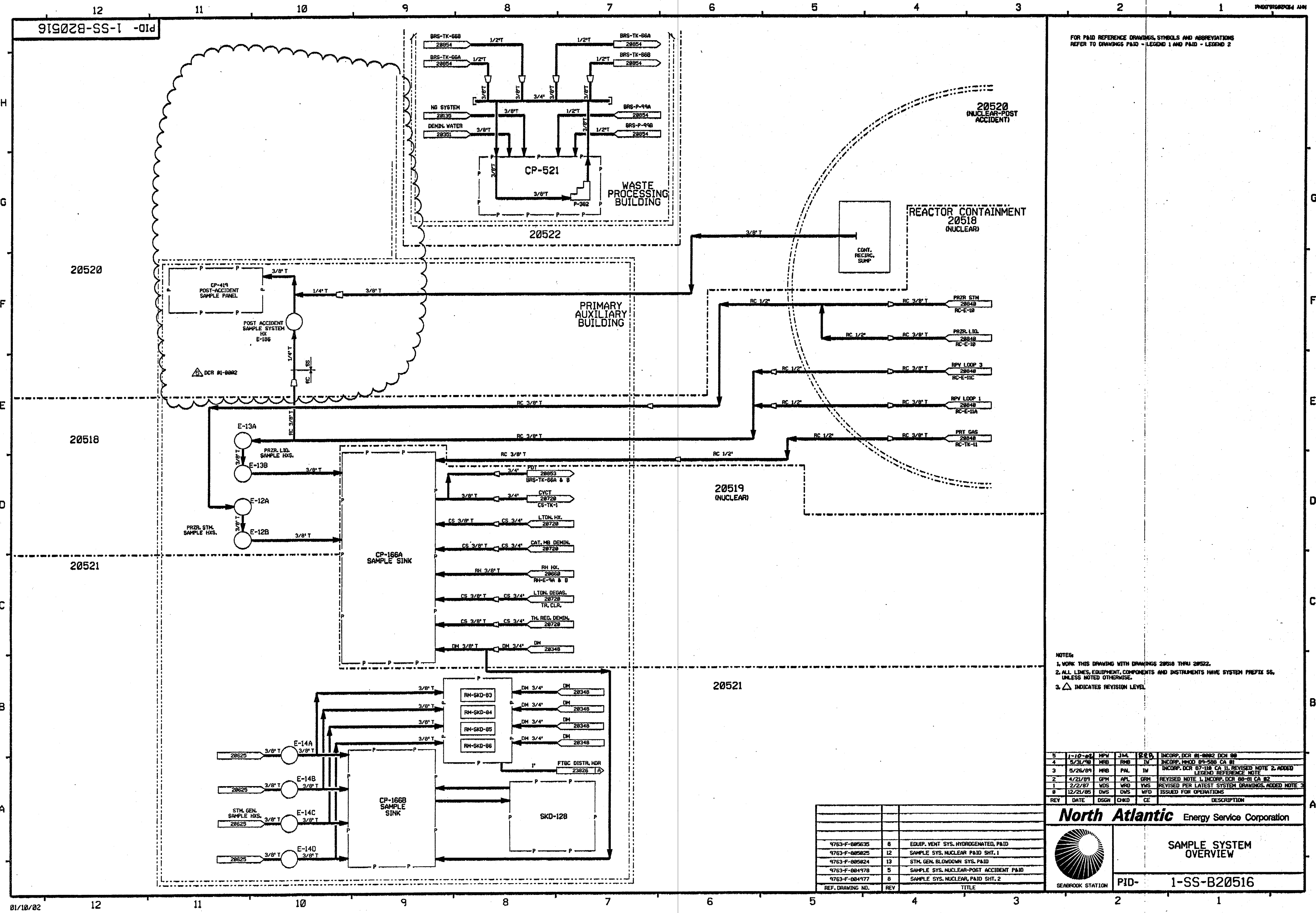
9	2/13/03	MPW	BCS	JM	INCCORP CR 02-16892
8	1/31/96	BCS	MPW	RSG	INCCORP M400 95-578 CA-9
7	11/16/93	MRB	BCL	RSG	INCCORP DCR 90-60 CA0
6	6/17/93	MRB	BCL	VWS	INCCORP DCR 91-32 CA0
5	2/23/89	GPM	APL	GRM	INCCORP DCR 87-93CA-1
4	10/14/87	MPW	BCL	RRC	INCCORP DCR 87/893
3	6/1/87	MPW	DWS	VWS	INCCORP ECA 19/1186578
2	11/21/86	FJR	PAL	RRC	ADDED BLDG BOUNDARIES, DWG CONT PLGS, ELEV LEVEL & PIPE CAP PER UEAC ERECTION ISO. CORRECTED DRAFTING ERRORS PER UEAC PAID, RELOCATED 3/4" LINE TO REFLECT ASBUILT CONDITION. DELETED NOTE 6.
1	6/18/86	JDM	DWS	RRC	CHG ITEMS 1 & 2 RESOLVED BY DR 02/322A, UPDATE REV DWG & REVISE ACCORDINGLY, DELETED CHANGE ITEM 3.
0	03/21/86	TAK	JDM	WFD	ISSUED FOR OPERATIONS INCCORP ECA 13/2001144 12/05/86 73/80
REV	DATE	DSGN	CHKD	SES	DESCRIPTION

FPL ENERGY
Seabrook Station

**SERVICE AIR SYSTEM
MISC. BUILDINGS
DETAIL**

PID- 1-SA-B20653


REF. DRAWING NO.	REV	TITLE
9763-F-900123	3	SERVICE AIR MITD
9763-F-900032	4	COMPRESSED AIR SYSTEM MITD
9763-F-804989	7	SERVICE AIR P & ID
9763-F-202105	11	COMPRESSED AIR SYS. KEY PLAN P & ID



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20518 THRU 20522.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SS, UNLESS NOTED OTHERWISE.
 3. Δ INDICATES REVISION LEVEL.

5	1-10-82	MPV	JML	225	INCORP. DCR 81-0002 DCH 08
4	5/31/78	NRB	RMB	IV	INCORP. HXCD 81-550 CA 81
3	5/26/81	NRB	PNL	IV	INCORP. DCR 87-118 CA 11, REVISED NOTE 2, ADDED LEGEND REFERENCE NOTE
2	4/21/81	GRM	AFL	GRM	REVISED NOTE 1, INCORP. DCH 88-81 CA 82
1	2/2/87	WDS	WMD	WMS	REVISED PER LATEST SYSTEM DRAWINGS, ADDED NOTE 3
0	12/21/85	DWS	DWS	MFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

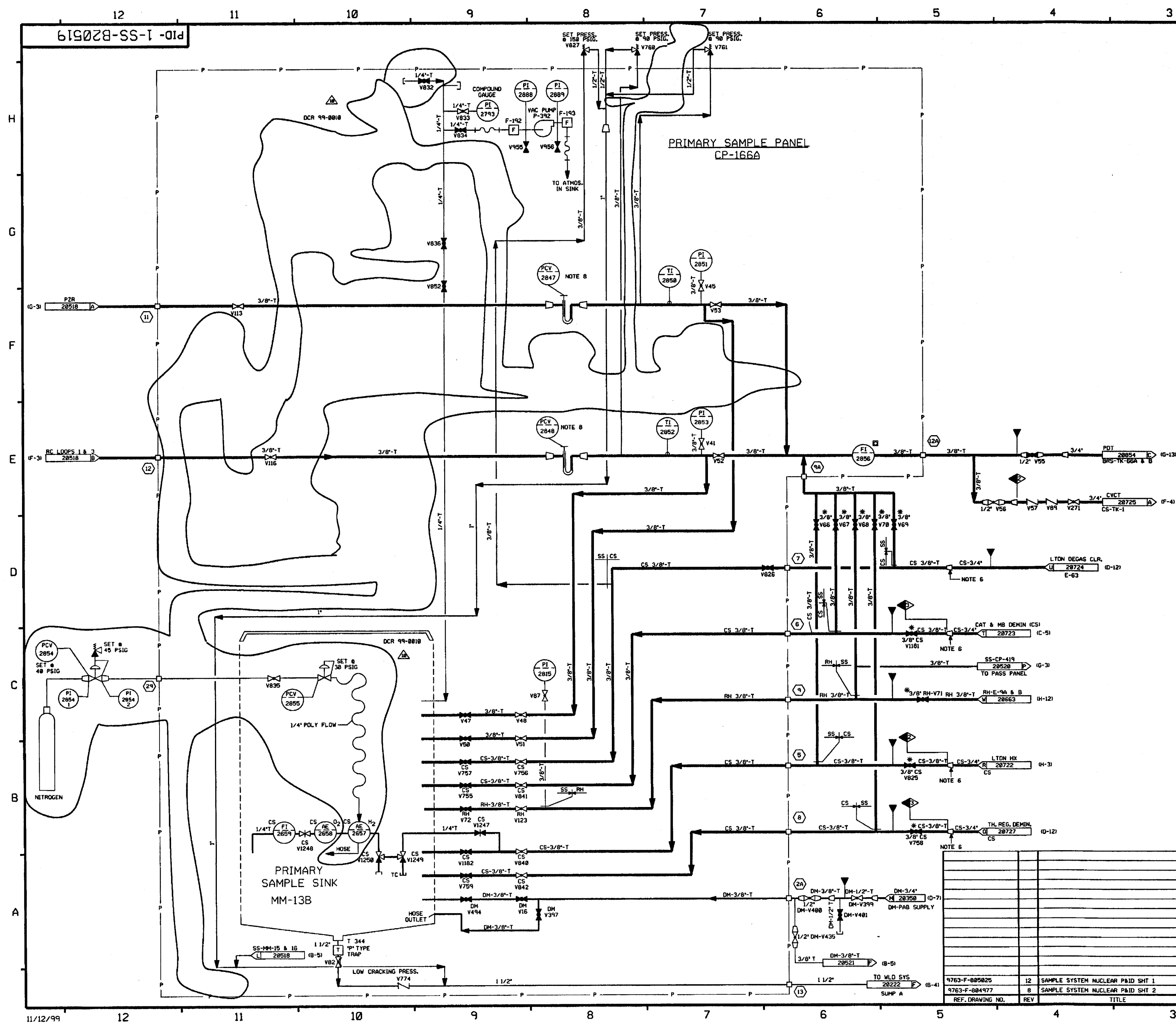


North Atlantic Energy Service Corporation

SAMPLE SYSTEM OVERVIEW

PID- 1-SS-B20516

REF. DRAWING NO.	REV	TITLE
9763-F-805635	8	EQUIP. VENT. SYS. HYDROGENATED, PAID
9763-F-805825	12	SAMPLE SYS. NUCLEAR PAID SHT. 1
9763-F-805824	13	STM. GEN. BLOWDOWN SYS. PAID
9763-F-804978	5	SAMPLE SYS. NUCLEAR-POST ACCIDENT PAID
9763-F-804977	8	SAMPLE SYS. NUCLEAR, PAID SHT. 2



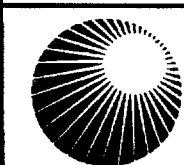
FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
1. WORK THIS DRAWING WITH DRAWING 2851A, 2851B, 2852B THRU 2852J.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "SS" UNLESS OTHERWISE NOTED.
 3. ALL TUBING 3/8" T AND MAT'L 2508 UNLESS OTHERWISE NOTED.
 4. DELETED
 5. DELETED
 6. THESE REDUCERS ARE TO BE AS CLOSE AS POSSIBLE TO ROOT VALVE.
 7. *THIS VALVE TO BE REACH ROD OPERATED FROM THE SAMPLE RM SIDE OF THE SAMPLE HX ROOM - SAMPLE WALL.
 8. THIS EQUIPMENT HAS 1/4" TUBING CONNECTORS.
 9. INDICATES REVISION LEVEL. DCR 99-0818
 10. DELETED.
 11. CONTINUATION CONNECTION SEE FP-74082.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
10	11/12/99	BCS	---	---	---	---	INCORP. DCR 99-0818 DCH-08, 01
9	8/16/97	HPW	---	---	---	---	INCORP. MM00 98-558 DCH 01
8	8/3/95	DWS	---	---	---	---	INCORP. MM00 920550 CA#8
7	4/3/91	GPM	FCB	JM	HRB	RRC	INCORP. MM00 98-597 CAB1
6	5/23/91	MRB	RMC	JM	CON	BCL	INCORPORATED MM00 98-586 CAB4
5	1/4/91	MRB	RMC	JM	DWS	BCL	INCORPORATED MM00 98-639 CAB1
4	2/23/90	MRB	JM	NPL	MPV	IV	INCORPORATED DCR 87-76, CAB1
INCORPORATED DCR 88-51 REV 1							
REVISED DCH CONT NUMBER, NOTES 1 & 2							
ADDED: P & ID LEGEND NOTE, NOTE 9							
DCH CONT COORDS & SYSTEM INTERFACE							
DELETED: NOTES 4 & 5, NNS-1 CL							
BOUNDARY, INCOMPLETE ITEM ECA							
95/11/4987B SUPERCEDED BY DCR 88-51							
3	2/1/89	GPM	RMC	MRB	NPL	DJM	RE-INCORP. PORTION OF ECA 95/11/4987B
2	9/17/88	BCL	TAK	MAP	VNK	RRC	ECA REMAINS AS PARTIALLY INCORPORATED
INCORP. ECA 95/11/4987A AND PARTIAL							
INCORP. ECA 95/11/4987B, REV PER							
VENDOR FP-71448, ADDED NOTE 8.							
1	9/12/86	JDM	TAK	MRD	BCL	RRC	ISSUED FOR OPERATIONS
0	12/31/85	DWS	MRB	JDM	JVC	WFD	

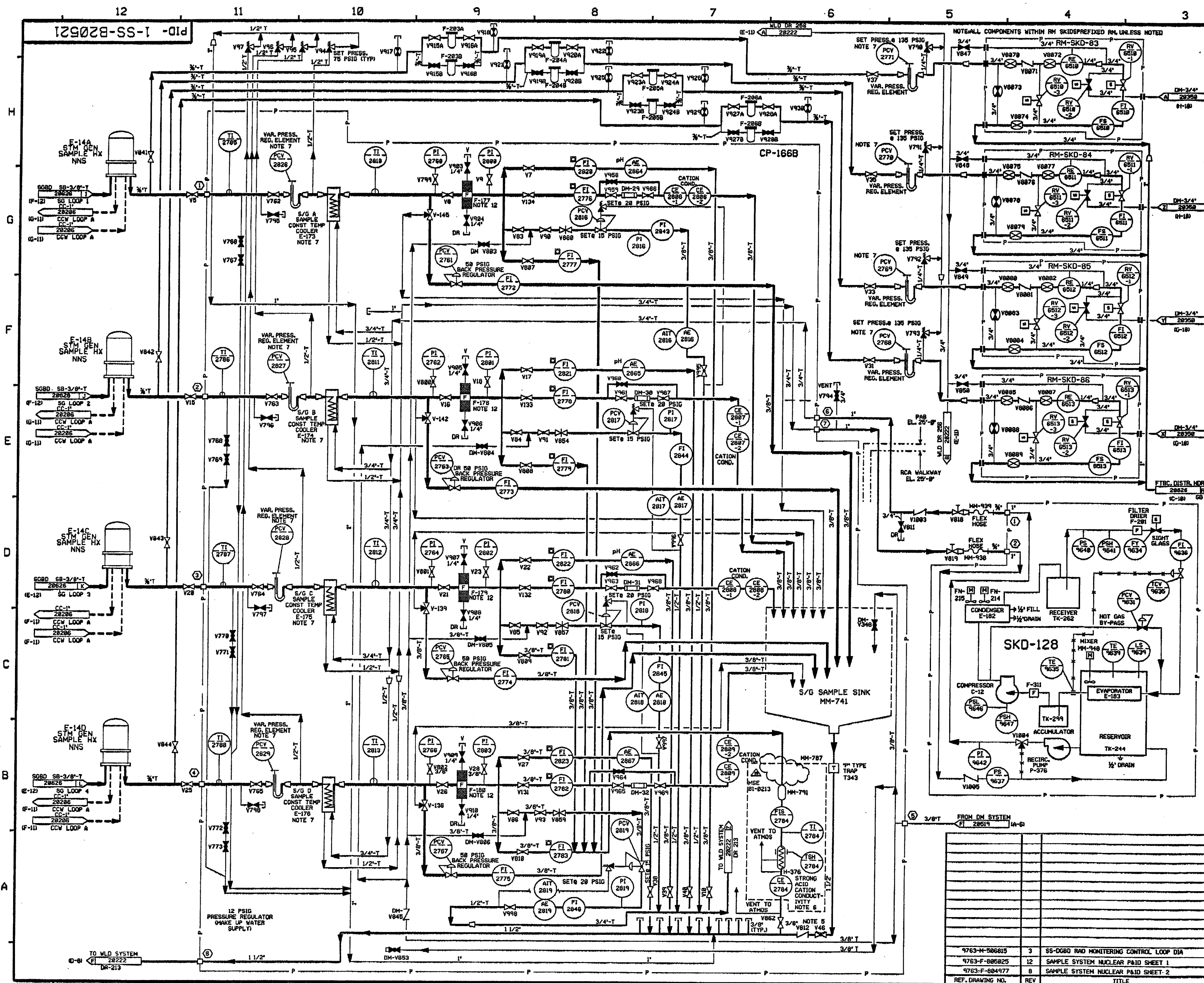
North Atlantic Energy Service Corporation



SAMPLE SYSTEM
PRIMARY SAMPLE PANEL
CP-166A

PID- 1-SS-B20519


9763-F-885025	12	SAMPLE SYSTEM NUCLEAR PAID SHT 1
9763-F-884977	8	SAMPLE SYSTEM NUCLEAR PAID SHT 2
REF. DRAWING NO.	REV	TITLE



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

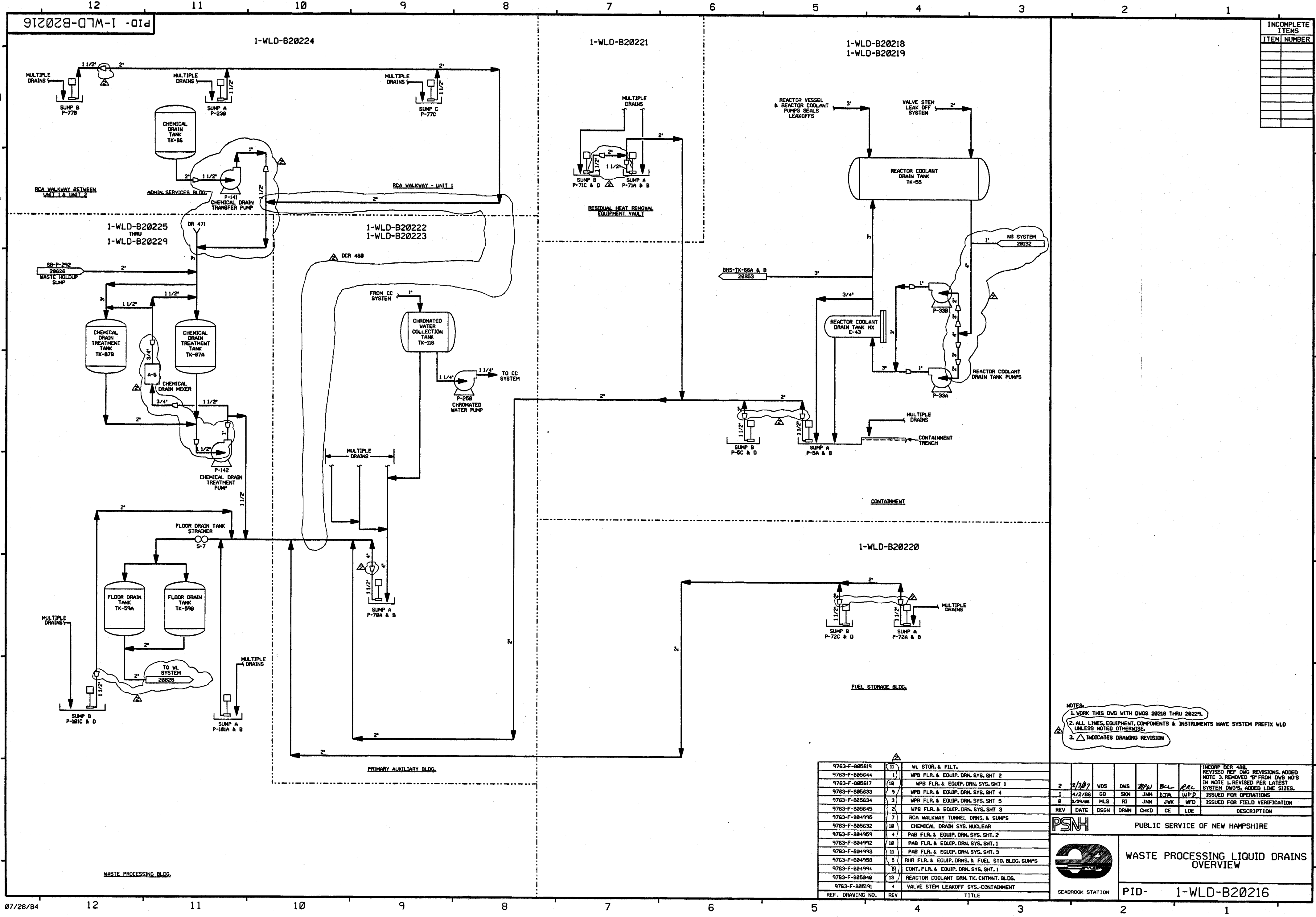
- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28516, 28518, 28519, 28520 & 28522.
 2. ALL LINES, EQUIPMENT COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX SS, UNLESS NOTED OTHERWISE.
 3. ALL TUBING 3/8" T AND MATL CLASS 2500 UNLESS NOTED OTHERWISE.
 4. SEE DMS 28518 FOR ADDITIONAL NOTES.
 5. LOW CRACKING PRESSURE VALVE.
 6. ONLY ONE S/G AT A TIME IS LINED UP TO THE SACC ANALYZER.
 7. THIS EQUIPMENT HAS 1/4" TUBING CONNECTIONS.
 8. DISPOSE OF COOLANT IN A PROPER CONTAINER FOR OFF SITE DISPOSAL DO NOT DIRECT TO FLOOR DRAINS.
 9. DRAINS ARE SLOPED TO OUTLET CONNECTION 004.
 10. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
 11. Δ INDICATES REVISION LEVEL.
 12. FILTER ELEMENTS OF THE FOLLOWING FILTERS MAY BE OPTIONALLY INSTALLED PER THE DIRECTION OF CHEMISTRY: 1-SS-F-177, 178, 179, 180

REV	DATE	DSGN	CHKD	SES	DESCRIPTION
15	12/6/81	BCS	mhu	SEA	INCORP. MSE 81-8231 REV. 00
14	6/22/81	BCL	BCL	SS	INCORP. DCR 80-0828, DCR-981, 982
13	11-2-76	BCL	NPV	RCP	INCORP. DCR 72-12 C&A, 4, 5
12	6/25/73	MRS	BCL	JWB	INCORP. DCR 70-39 C&B
11					
10					
9					
8					
7					
6					
5					
4					
3					
2					
1					

**North Atlantic** Energy Service Corporation

**SAMPLE SYSTEM
STEAM GENERATOR
SAMPLE PANEL 1668 P&ID**

PID- 1-SS-B20521



INCOMPLETE ITEMS	
ITEM	NUMBER

NOTES:
1. WORK THIS DWG WITH DWGS 20218 THRU 20224.
2. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
3. Δ INDICATES DRAWING REVISION

9763-F-805619	1	WL STOR. & FILT.
9763-F-805644	1	WPB FLR. & EQUIP. DRN. SYS. SHT. 2
9763-F-805617	10	WPB FLR. & EQUIP. DRN. SYS. SHT. 1
9763-F-805633	9	WPB FLR. & EQUIP. DRN. SYS. SHT. 4
9763-F-805634	3	WPB FLR. & EQUIP. DRN. SYS. SHT. 5
9763-F-805645	2	WPB FLR. & EQUIP. DRN. SYS. SHT. 3
9763-F-804995	7	RCA WALKWAY TUNNEL DRNS. & SUMPS
9763-F-805632	10	CHEMICAL DRAIN SYS. NUCLEAR
9763-F-804959	4	PAB FLR. & EQUIP. DRN. SYS. SHT. 2
9763-F-804992	10	PAB FLR. & EQUIP. DRN. SYS. SHT. 1
9763-F-804993	11	PAB FLR. & EQUIP. DRN. SYS. SHT. 3
9763-F-804958	5	RVR FLR. & EQUIP. DRNS. & FUEL STO. BLDG. SUMPS
9763-F-804994	8	CONT. FLR. & EQUIP. DRN. SYS. SHT. 1
9763-F-805040	13	REACTOR COOLANT DRN. TK. CONTNMT. BLDG.
9763-F-805191	4	VALVE STEM LEAKOFF SYS.-CONTAINMENT
REF. DRAWING NO.	REV	TITLE

22/3/07

WDS

DWS

JMM

B-L

WFD

REV

DATE

DSGN

DRWN

CHKD

CE

LDE

INCORP DCR 488, REVISED REF DWG REVISIONS, ADDED NOTE 3, REMOVED "S" FROM DWG NOS IN NOTE 1, REVISED PER LATEST SYSTEM DWG'S, ADDED LINE SIZES.

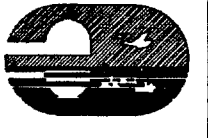
ISSUED FOR OPERATIONS

ISSUED FOR FIELD VERIFICATION

DESCRIPTION

PSNH

PUBLIC SERVICE OF NEW HAMPSHIRE

SEABROOK STATION

WASTE PROCESSING LIQUID DRAINS OVERVIEW

PID- 1-WLD-B20216



PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

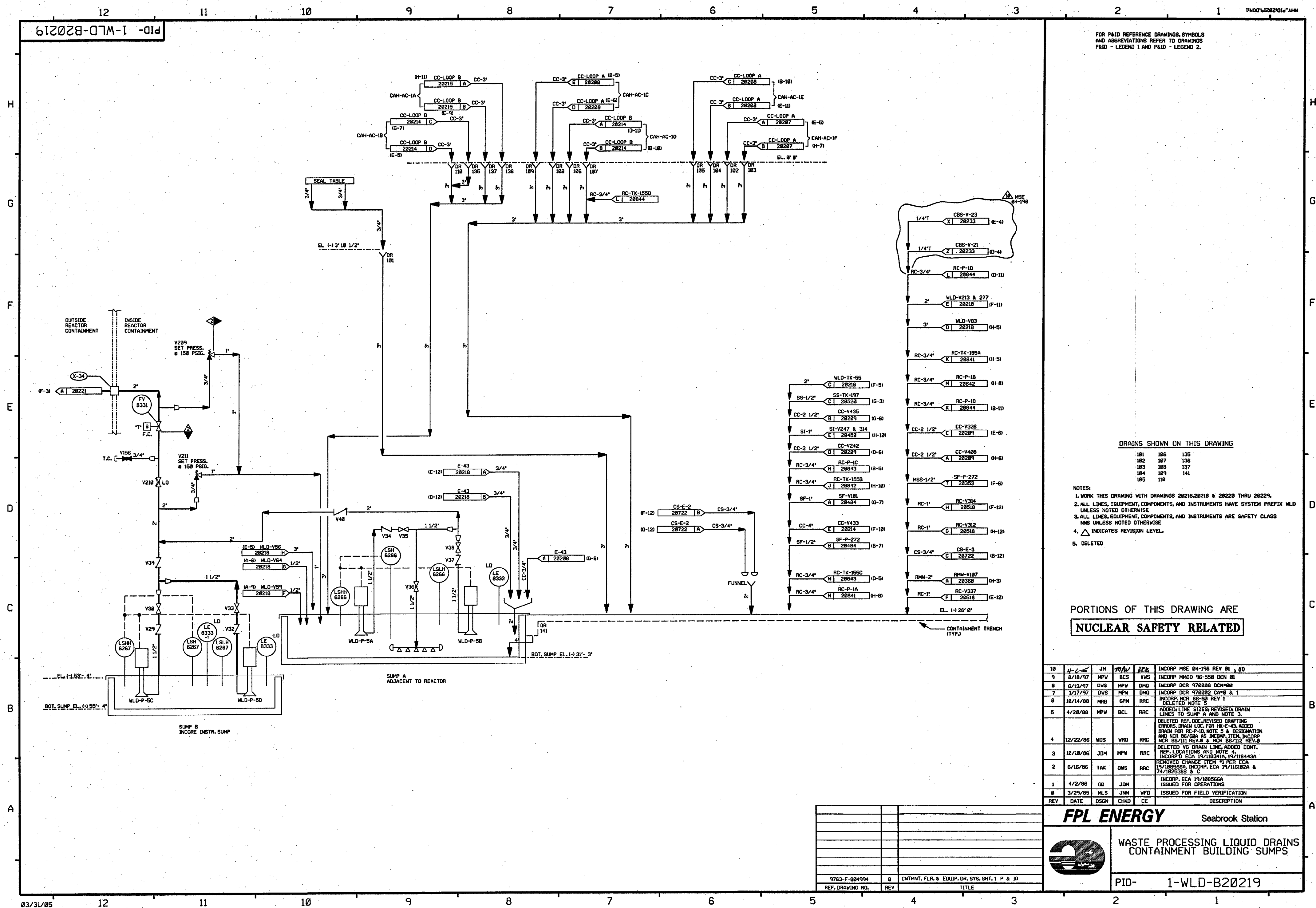
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North Atlantic Energy Service Corporation



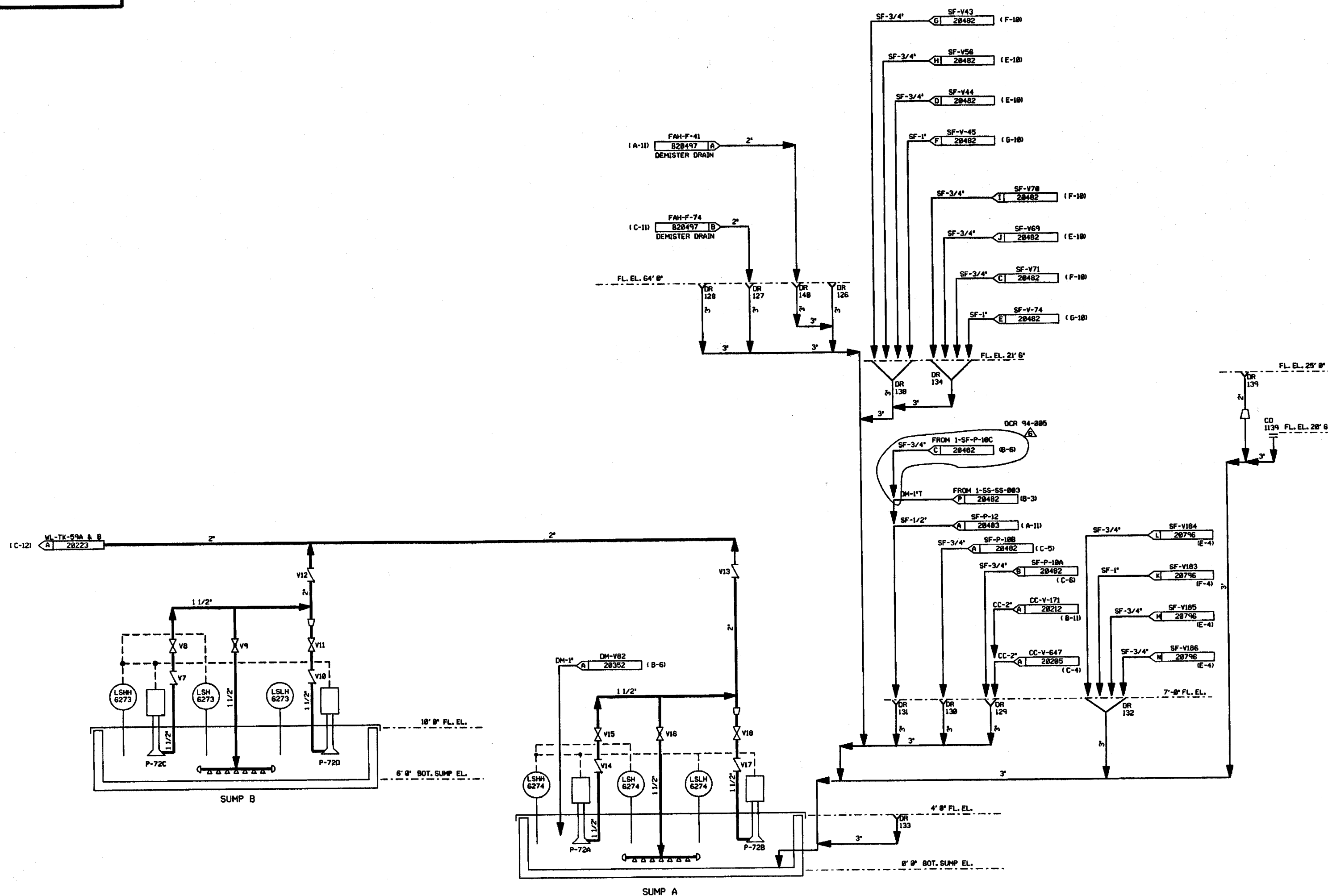
WASTE PROCESSING LIQUID DRAINS
REACTOR COOLANT SYSTEM

PID- 1-WLD-B20218



PID-1-WLD-B20220

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



DRAINS ON THIS DRAWING

126	132
127	133
128	134
129	135
130	136
131	137

CLEANOUT ON THIS DRAWING

1139

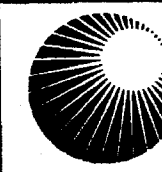
NOTES:

1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218, 20219, & 20221 THRU 20224.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS.

4. △ - INDICATES REVISION LEVEL.

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
6	3/21/97	BCS	MRB	MPW	RRC	INCORP. DCR 94-005 CAG	
5	12/03/96	JH	MRB	MPW	RRC	INCORP. DCR 90-42 CA32	
4	8/14/96	MRB	JH	FCB	QPM	BCL	INCORP. DCR 90-42 CAG
3	5/21/96	MRB	RMC	APL	BCL	GRM	INCORP. DCR 87-294 CAG4
2	12/12/88	FJR	TAK	MRJ	BCL	RRC	ADDED CONTINUATION FLAG COORDS, REFERENCE DRAWINGS AND NOTE 4.
1	4/2/88	GD	CJS	JDM	DFH	WFD	ISSUED FOR OPERATIONS
0	3/24/85	MLS	MRB	JHM	JMK	WFD	ISSUED FOR FIELD VERIFICATION

North Atlantic Energy Service Corporation



WASTE PROCESSING LIQUID DRAINS
FUEL STORAGE BUILDING

PID- 1-WLD-B20220

REF. DRAWING NO.	REV	TITLE
9763-F-004958	4	RHR FLR & EQUIP DRNS & FUEL STO. BLDG SUMP-PAID

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

151	156	161
152	157	162
153	158	163
154	159	164
155	160	165

CLEANOUT ON THIS DRAWING

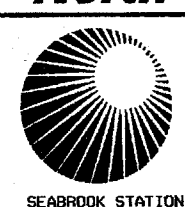
1152

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 28216, 28218 THRU 28228, & 28222 THRU 28224.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. DELETED.
 4. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS UNLESS NOTED OTHERWISE.
 5. Δ INDICATES REVISION LEVEL.
 6. V263 IS A SPRING LOADED, SELF-CLOSING VALVE, PROVIDING MELB PROTECTION FROM CROSS-TRAIN FLOODING OF VAULTS.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

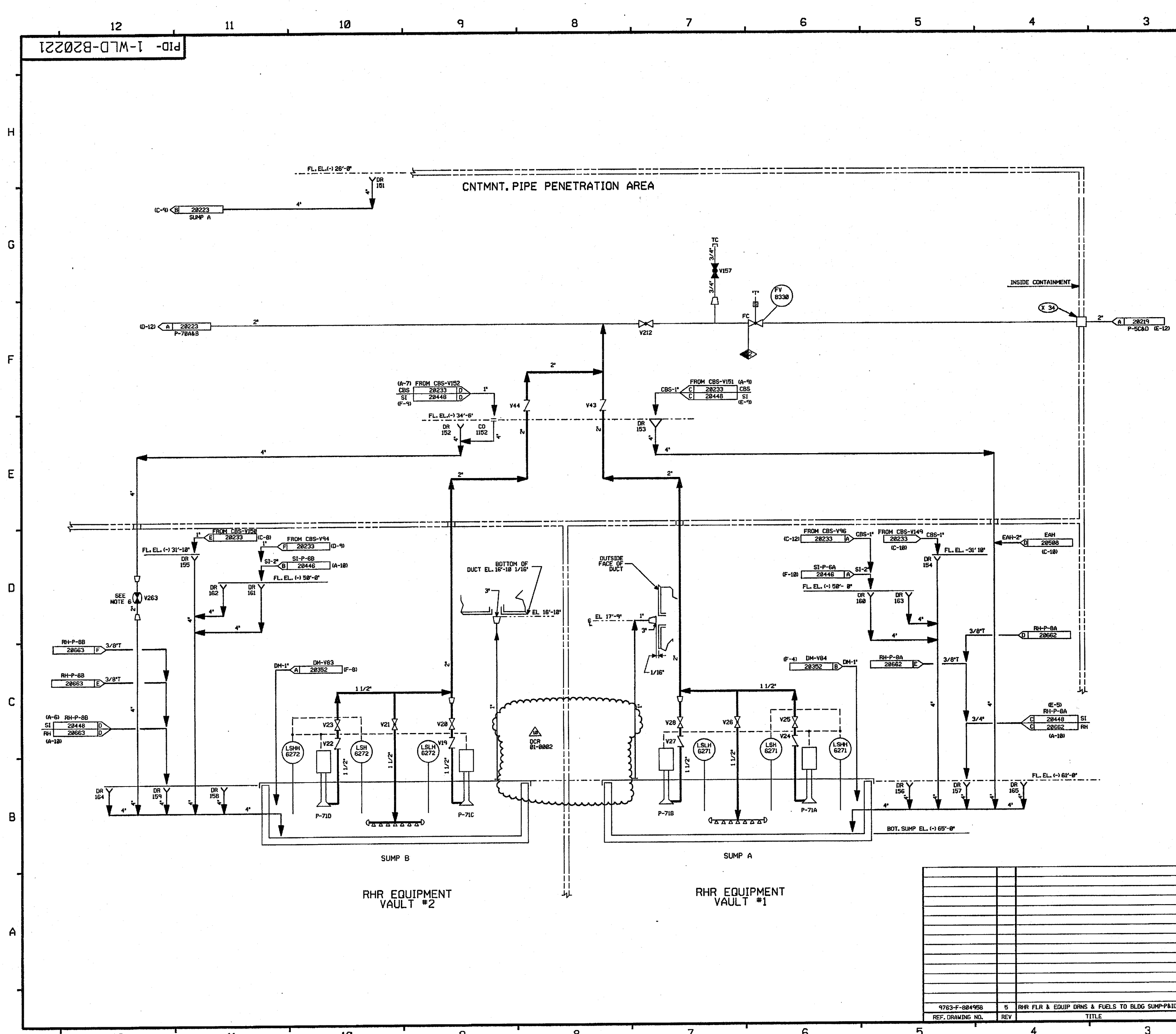
18	1-10-80	MPW	---	BS	---	RS	INCORP. DCR 81-8882 DCN 88
9	3/25/91	BCL	---	MRB	DWS	GPM	INCORP. MM00 92-552 CAG
8	8/25/90	MRB	FCB	JM	APL	BCL	INCORP. MM00 90-681 CAG
7	11/1/89	MRB	FCB	APL	WCL	GRM	COMPLETE INCORP. DCR 87-311 CAG
6	9/6/89	MRB	RMC	APL	BCL	WFD	PARTIAL INCORP. OF DCR 87-311 CA 87
5	4/21/89	MPW	RMC	APL	MRB	GPM	ADDED LINES FROM DWG 22652 SHOWN ON THIS DWG. PER CHEMISTRY REQUEST REVISED. CONT. REF. COORD. EAM CONT. & NOTE 4 DELETED PIPE SPECS.
4	7/18/87	MPW	RIW	PAL	BCL	VNS	INCORP. DCR 86-482.
3	11/4/86	MAP	OPD	VRD	BCL	RRR	REVISED REF. DWG REV. ADDED P&ID LEGEND NOTE, DWG COORDS. REMOVED ALFA FROM DWG REF. NOTE L.
2	9/2/86	MAP	WES	JDM	BCL	RRR	DELETED NOTE 3 & INCORP. ECA 74/1165678
1	4/2/86	GD	GJS	JDM	DLM	WFD	ISSUED FOR OPERATIONS
9	3/24/85	MLS	MRB	JNM	JWK	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

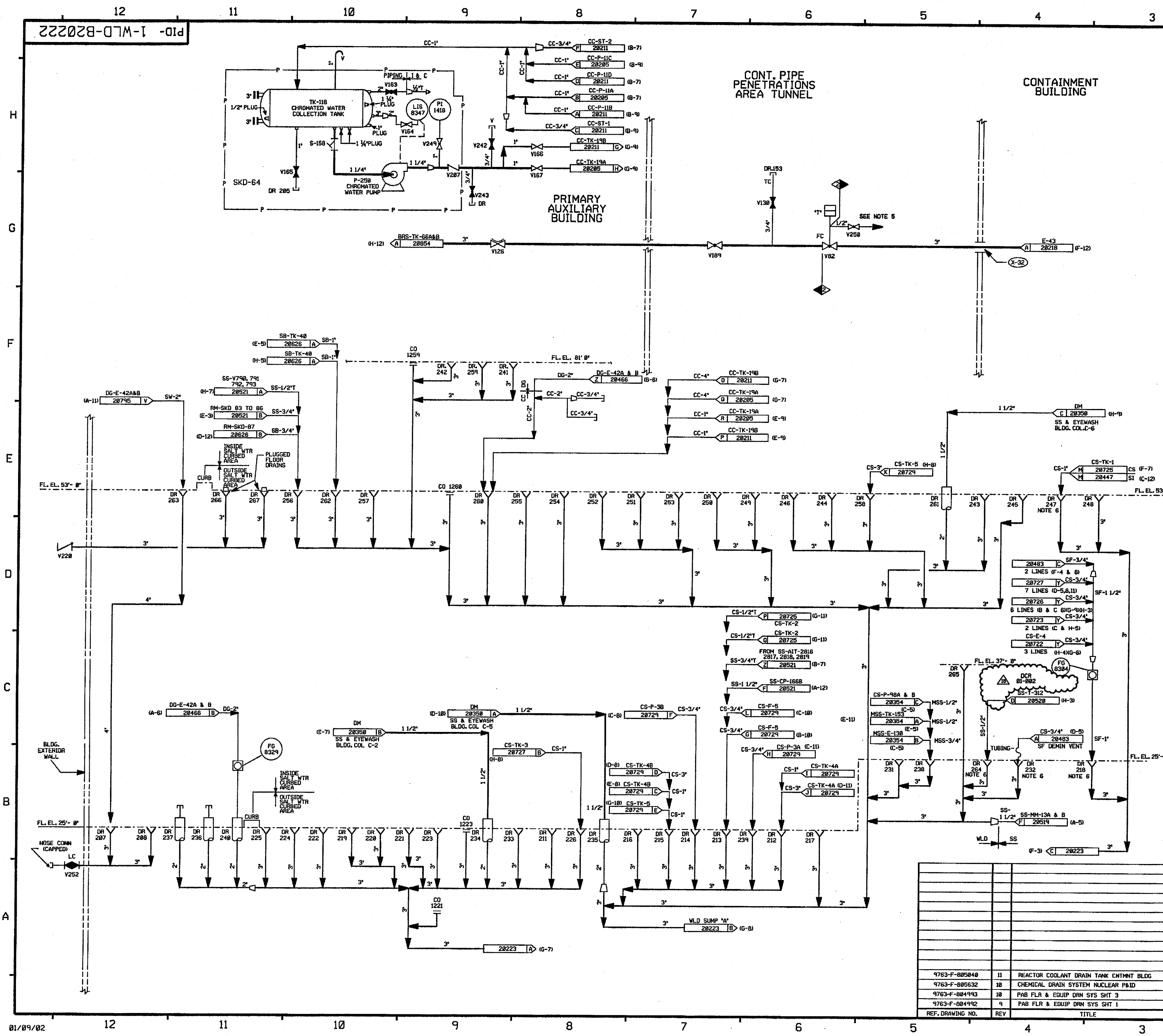
North Atlantic Energy Service Corporation



WASTE PROCESSING LIQUID DRAINS
RHR
EQUIPMENT VAULTS #1 & #2

PID- 1-WLD-B20221





FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

207	219	233	243	253	263
208	220	234	244	254	264
211	221	235	245	255	265
212	222	236	246	256	266
213	223	237	247	257	267
214	224	238	248	258	268
215	225	239	249	259	269
216	226	240	250	260	270
217	231	241	251	261	271
218	232	242	252	262	272

CLEANOUTS ON THIS DRAWING

1221
1223
1259
1260

- NOTES:
- WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20221, & 20223 THRU 20224.
 - ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION HAVE SYSTEM PREFIX UNLESS NOTED OTHERWISE.
 - ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION ARE SAFETY CLASS UNLESS NOTED OTHERWISE.
 - INDICATES REVISION LEVEL.
 - REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFF.
 - THIS DRAIN HAS A GAS CONTAINMENT DEVICE ADDED PER MM00 96-055.

**PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED**

8	18	1/10/88	MPW	---	P&S	---	INCORP DCR 01-002 DCH 00
	17	10/3/88	BCS	---	MPW	MRB	INCORP MM00 94-507 DCH 00
	16	3/4/88	BCS	---	DWS	MPW	INCORP MM00 96-055 DCH 03
	15	8/10/87	DWS	---	MPW	FAC	VVS INCORP OF DCR 960016 CAP#
	14	5/28/87	DWS	---	MPW	FAC	VVS PARTIAL INCORP OF DCR 960016 CAP#
	13	5/18/87	MPW	---	BCS	MRB	VVS INCORP MM00 96-055 CAP#
	12	1/18/87	MPW	---	BCS	DWS	MRB INCORP DCR 87-055 CAP#
	11	11/2/86	BCL	---	MPW	RCP	MRB INCORP DCR 92-42 CAP#
	10	7/26/86	BCL	---	DWS	MPW	VVS INCORP MM00 94-547 CAP#
	9	8/3/85	MRB	---	BCL	DWS	DMO INCORP MM00 91-516 CAP#
	8	4/16/85	BCL	---	MPW	MRB	MPW INCORP MM00 91-507 CAP#
	7	4/21/82	MRB	---	BCL	DWS	REV INCORP MM00 91-515 CAP#
	6	8/18/81	MRB	---	FCB	DWS	GRM INCORP MM00 89-530 REV 0
	5	4/21/80	GPM	RMC	APL	BCL	POS INCORP DCR 86-401CAI REVISED NOTE 3, PIPING PER AS INSTALLED CONFIGURATION, SALT DWS NOS. & COORD'S, CONT. WATER BOUNDARY, ADDED CONT COORD'S & MATCH UP LETTERS, NOTE 5, TK-118 CONNECTIONS DELETED BUILDING DESIGNATION.
	4	12/3/86	MAP	OPD	MPW	BCL	RRC REVISED PER UAC ERECTION ISO, ADD ISO, REF. DWS'S, DWG. LOC. COORD'S & NOTE 4.
3	9/2/86	MAP	TAK	MAP	YMK	RRC INCORP. ECA 99/115494A	
2	6/16/86	JDM	GJS	DWS	JMS	RRC ADD LETTER DESIG. TO CONTRIBUTIONS INCORP. ECA 17/186629A	
1	4/2/86	GD	GJS	JDM	DM	WFO INCORP. ECA 88/114678B	
0	3/29/85	MMS	MRB	JNM	JWK	WFO ISSUED FOR FIELD VERIFICATION	
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

North Atlantic Energy Service Corporation

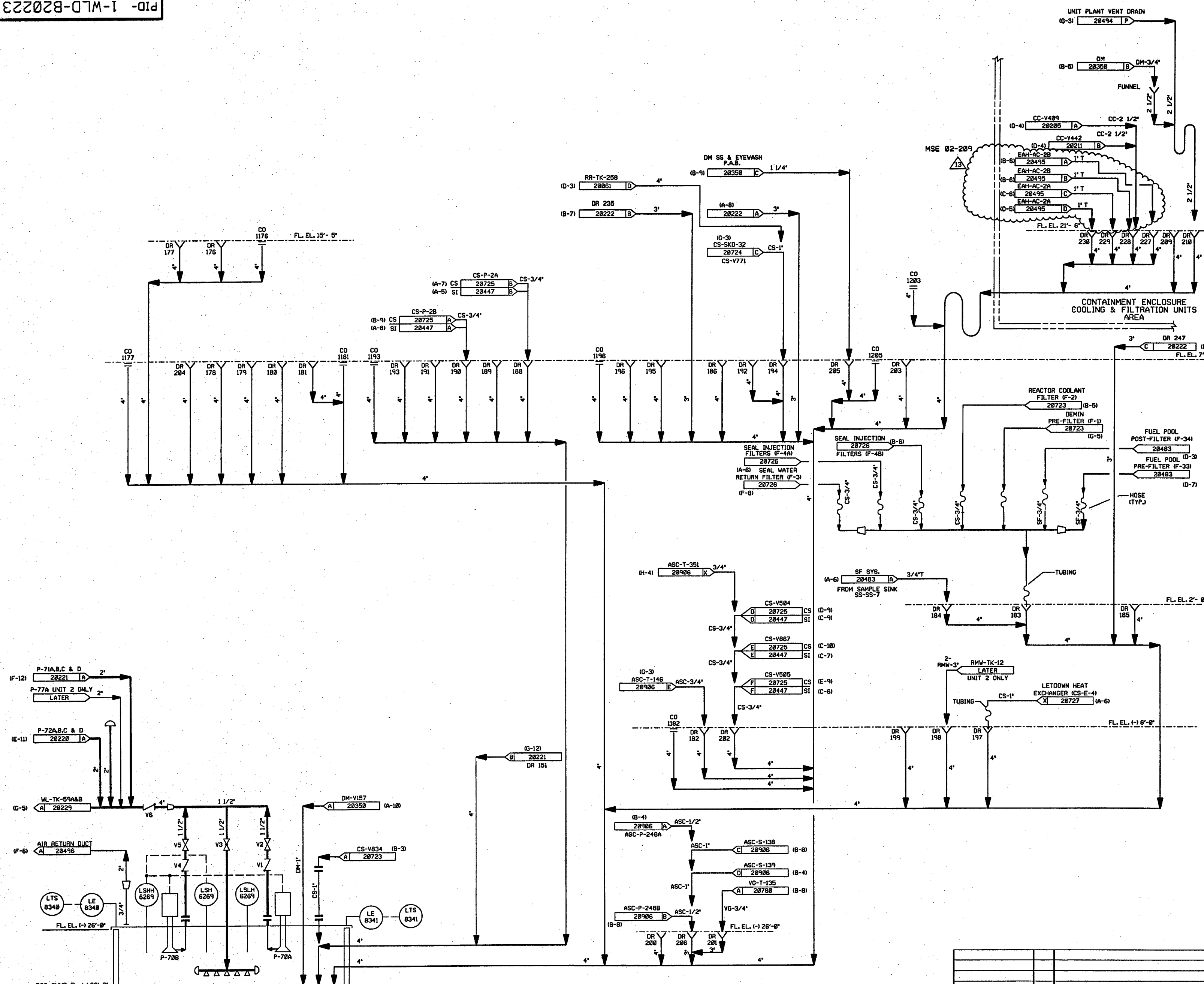
**WASTE PROCESSING LIQUID DRAINS
PRIMARY AUXILIARY BLDG.
SHT. 1 OF 2**

PID- 1-WLD-B20222

CATEGORY 1

PID-1-WLD-B20223

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



DRAINS ON THIS DRAWING

176	183	191	198	205	230
177	184	192	199	206	
178	185	193	200	207	
179	186	194	201	208	
180	187	195	202	209	
181	188	196	203	210	
182	189	197	204	211	

CLEANOUTS ON THIS DRAWING

1176	1193	1446 (UNIT #2)
1177	1196	
1181	1203	
1182	1205	

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20222, & 20224 THRU 20229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, & INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS, & INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 4. Δ INDICATES REVISION LEVEL.

REV	DATE	DSGN	CHKD	CE	DESCRIPTION
13	10-21-88	BCS	JMA	MSB	INCORP. MSE 02-209 REV. 00
12	1/18/82	MPW	BCS	RRB	INCORP. DCR 01-0086 CEN 00
11	8/18/97	BCL	BCS	VWS	INCORP. MM00-91-507 CA-0
10	11/2/92	BCL	DWS	DJM	INCORP. DCR 00-179 CA0
9	4/23/92	MRB	BCL	JEV	INCORP. MM00-91-515 CA0
8	7/25/91	MRB	JH	JEV	INCORP. DCR 00-244 CA0
7	3-16-90	MRB	APL	RSG	INCORP. DCR 07-33 CA7 REVISED NOTE 3 ADDED: CONTINUATION TAG DESCRIPTIONS
6	3/22/88	MPW	BCL	RRR	LINE FROM DWG 20528 SHOWN GOING TO SUMP PER CHEMISTRY REQUEST.
5	2/3/87	JDM	MPW	RRR	INCORP. DCR 400
4	12/1/86	VDS	MRJ	RRR	REVISED REF. DWG. REVISIONS, ADDED FLANGES AT SUMP A
3	10/18/86	MAP	JDM	RRR	ADDED DWG. LOCATION COORD. & NOTE 4. RE-INCORPORATED ECA 99/114510A INC. ECA'S 99/086183C, 99/100049A
2	6/13/86	TAK	DWS	RRR	INC ECA'S 99/114510A & 99/086183A
1	4/2/86	GD	JDM	WFO	ISSUED FOR OPERATIONS
0	3/24/85	MLS	RSL	WFO	ISSUED FOR FIELD VERIFICATION

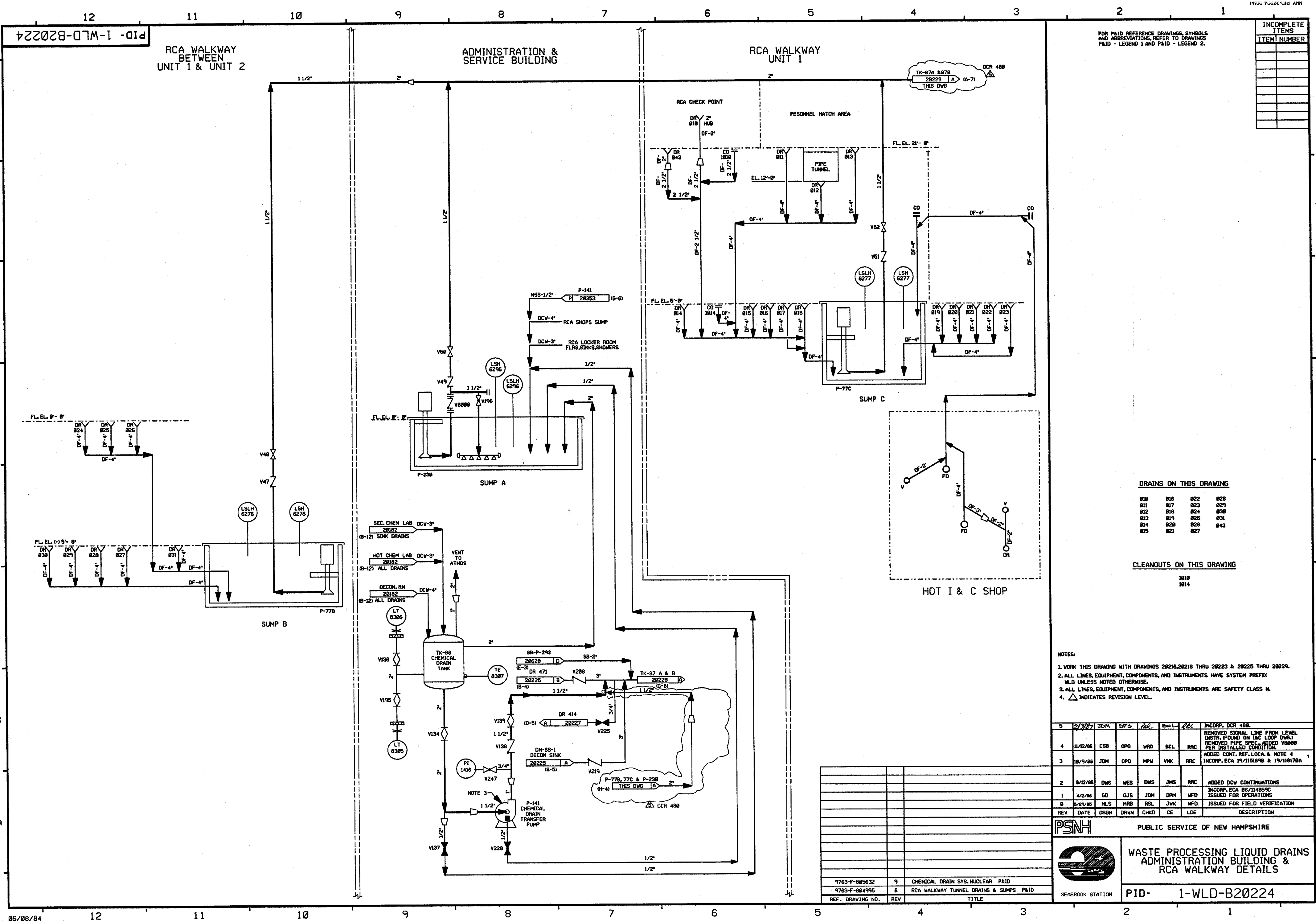
FPL ENERGY

Seabrook Station

WASTE LIQUID DRAINS
PRIMARY AUXILIARY BLDG.
SHT. 2 OF 2

PID- 1-WLD-B20223

REF. DRAWING NO.	REV	TITLE
9763-F-004993	10	PAB FLR & EQUIP DRN SYS SHT 3 PAID
9763-F-004994	4	PAB FLR & EQUIP DRN SYS SHT 2 PAID
9763-F-004992	10	PAB FLR & EQUIP DRN SYS SHT 1 PAID




INCOMPLETE ITEMS	
ITEM	NUMBER

DRAINS ON THIS DRAWING			
819	816	822	828
811	817	823	829
812	818	824	830
813	819	825	831
814	820	826	843
815	821	827	

CLEANOUTS ON THIS DRAWING	
1818	
1814	

NOTES:									
1. WORK THIS DRAWING WITH DRAWINGS 28216, 28218 THRU 28223 & 28225 THRU 28229.									
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.									
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS N.									
4. Δ INDICATES REVISION LEVEL.									
5	2/3/87	JDM	DFS	RL	BOL	RLC	INCORP. DCR 488		
4	11/12/86	CSB	OPD	WRD	BCL	RRR	REMOVED SIGNAL LINE FROM LEVEL INSTR. FOUND ON I&C LOOP DWG. J		
3	10/9/86	JDM	OPD	MPW	VNK	RRR	REMOVED PIPE SPEC. ADDED V8800 FOR INSTALLED CONDITION.		
2	8/12/86	DWS	WES	DWS	JMS	RRR	ADDED DCV CONTINUATIONS		
1	4/2/86	GQ	GJS	JDM	DPM	WFD	INCORP. ECA 86/11489C		
0	3/29/86	MLS	MRB	RSL	JWK	WFD	ISSUED FOR FIELD VERIFICATION		
REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION		

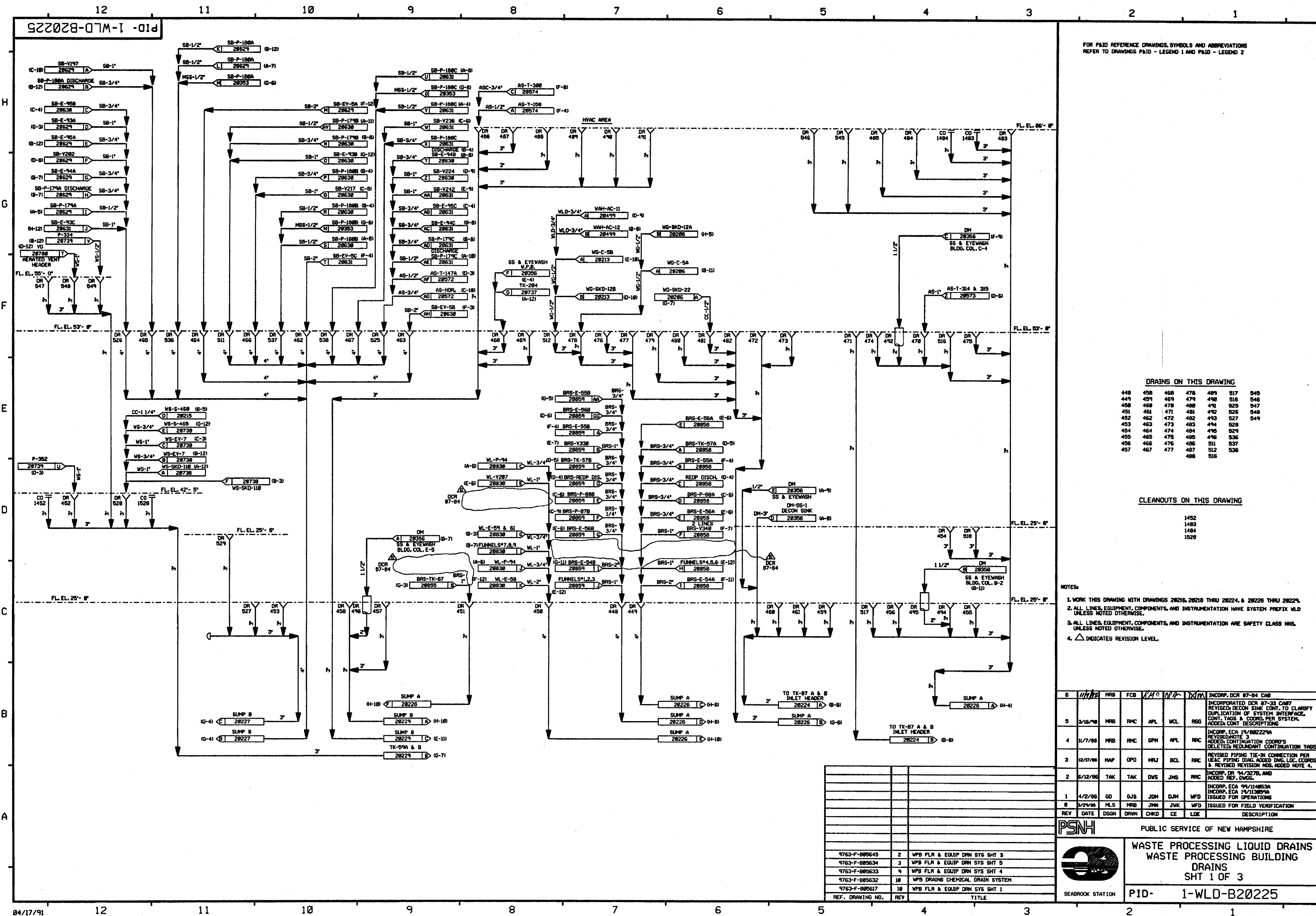


PUBLIC SERVICE OF NEW HAMPSHIRE

WASTE PROCESSING LIQUID DRAINS
ADMINISTRATION BUILDING &
RCA WALKWAY DETAILS

PID- 1-WLD-B20224

REF. DRAWING NO.	REV	TITLE
9763-F-885632	9	CHEMICAL DRAIN SYS. NUCLEAR P&ID
9763-F-884995	6	RCA WALKWAY TUNNEL DRAINS & SUMPS P&ID



2220228-B20226

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

DRAINS ON THIS DRAWING

416	431	440	500	508
417	432	441	501	509
420	433	442	502	519
421	434	443	503	530
422	435	444	504	531
423	436	445	505	533
429	437	446	506	532
430	439	447	507	

CLEANOUTS ON THIS DRAWING

1421
1430
1442
1509

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20225, 20227 THRU 20229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTATION HAVE SYSTEM PREFIX WLD, UNLESS NOTED OTHERWISE.
 3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
 4. Δ INDICATES REVISION LEVEL.

6	7/1/00	BCS	—	MRB	DEA	INCORP 99-594 DCN-00
5	11/1/99	MRB	—	BCL	DWS	INCORP DCR 87-84 C&D
4	3/27/99	MRB	RMC	JM	GPM	WFO
3	12/4/98	MPW	OPO	MRD	BCL	RRC
2	5/24/98	GD	GJS	VFS	JMS	RRC
1	3/24/95	GD	GJS	JDM		
0	3/24/95	MLS	MRB	JNM	JWK	WFO
REV	DATE	DSGN	DRWN	CHKD	SES	DESCRIPTION

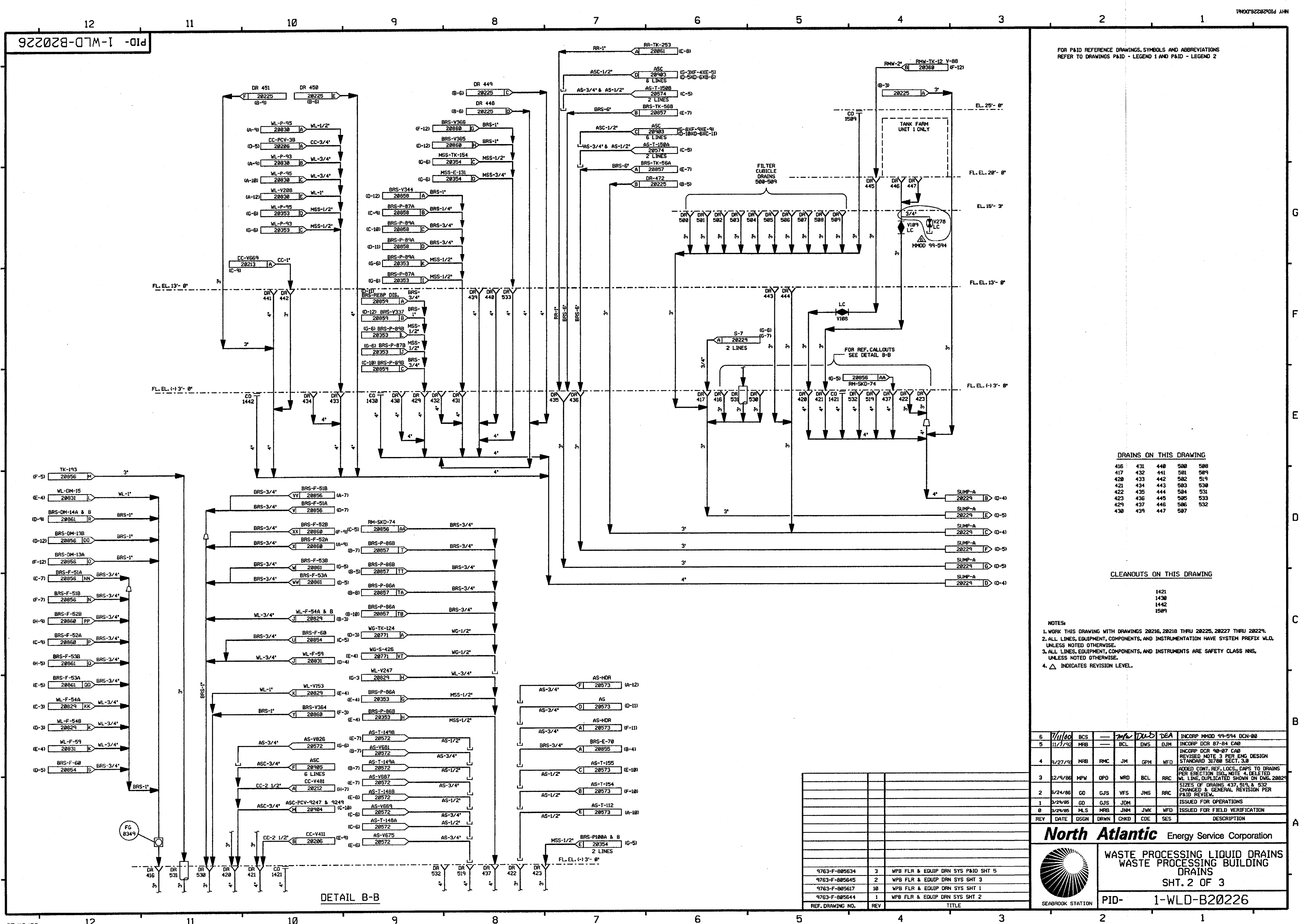
North Atlantic Energy Service Corporation

WASTE PROCESSING LIQUID DRAINS
WASTE PROCESSING BUILDING
DRAINS
SHT. 2 OF 3

PID- 1-WLD-B20226

9763-F-805634	3	WPB FLR & EQUIP DRN SYS SHT 5
9763-F-805645	2	WPB FLR & EQUIP DRN SYS SHT 3
9763-F-805617	10	WPB FLR & EQUIP DRN SYS SHT 1
9763-F-805644	1	WPB FLR & EQUIP DRN SYS SHT 2
REF. DRAWING NO.	REV	TITLE

DETAIL B-B



PID-1-WLD-B20227

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

DRAINS ON THIS DRAWING

414	425	497	522	540	553	558
415	426	510	523	541	554	559
418	427	514	534	542	555	
419	428	520	535	543	556	
424	438	521	539	544	557	

CLEANOUTS ON THIS DRAWING

1520

NOTES

1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218 THRU 20226, 20228 & 20229.
2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX UNLESS NOTED OTHERWISE.
3. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.
4. Δ INDICATES REVISION LEVEL.
5. DELETED

14	11-2-07	BCS	JM	222	INCORP MSE 04-152 REV. 0
13	7-24-03	BCS	JM	MKC	INCORP MSE 03-147 REV. 0
12	1-21-94	DWS	MRB	RSG	INCORP DCR 86-174 CA 0
11	7-17-92	MRB	BCL	RSG	INCORP DCR 86-538 CA 0
10	3/23/92	MRB	BCL	RSG	INCORP MMD 91-501 CA 0
9	8/21/91	MRB	JM	PEB	INCORPORATED 90-7 CA 03
8	5/16/90	MRB	APL	RSG	INCORPORATED 87-33 CA 5
7	5/26/89	GPM	PAL	JW	INCORPORATED 87-110 CA 11
6	11/7/88	MRB	GPM	RRC	REVISED NOTE 3 ADDED CONTINUATION TAG AND LOCATION COORDINATE MADE MINOR DRAFTING ENHANCEMENTS FOR CLARITY
5	10/23/87	MPW	BCL	PAG	ADDED DRAIN LINES FROM P-39 A&B CONT. DNG NUMBERS AND LOCATION COORDINATES. DELETED UNIT 2 LINE, AS LINES (SHOWN ON DWG. 20576)
4	4/8/87	WDS	MRJ	VWS	INCORP DCR 87-0013.
3	12/1/86	CSB	WRD	RRC	ADDED PAID REF DWG NOTE, DRAIN LINES TO DR 419 PER ECA 19/111538C, CONT P.D. COORDS, UNIT 2 DRAIN LINE PER LINE BY LINE VERIFICATION.
2	8/19/86	JDM	DWS	JMS	REV PER UESC PAID 805637 REV-7
1	4/2/86	GD	JDM	WFO	ISSUED FOR OPERATIONS
0	3/29/86	MLS	JNM	WFO	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station

WASTE PROCESSING BUILDING
DRAINS
SHT. 3 OF 3

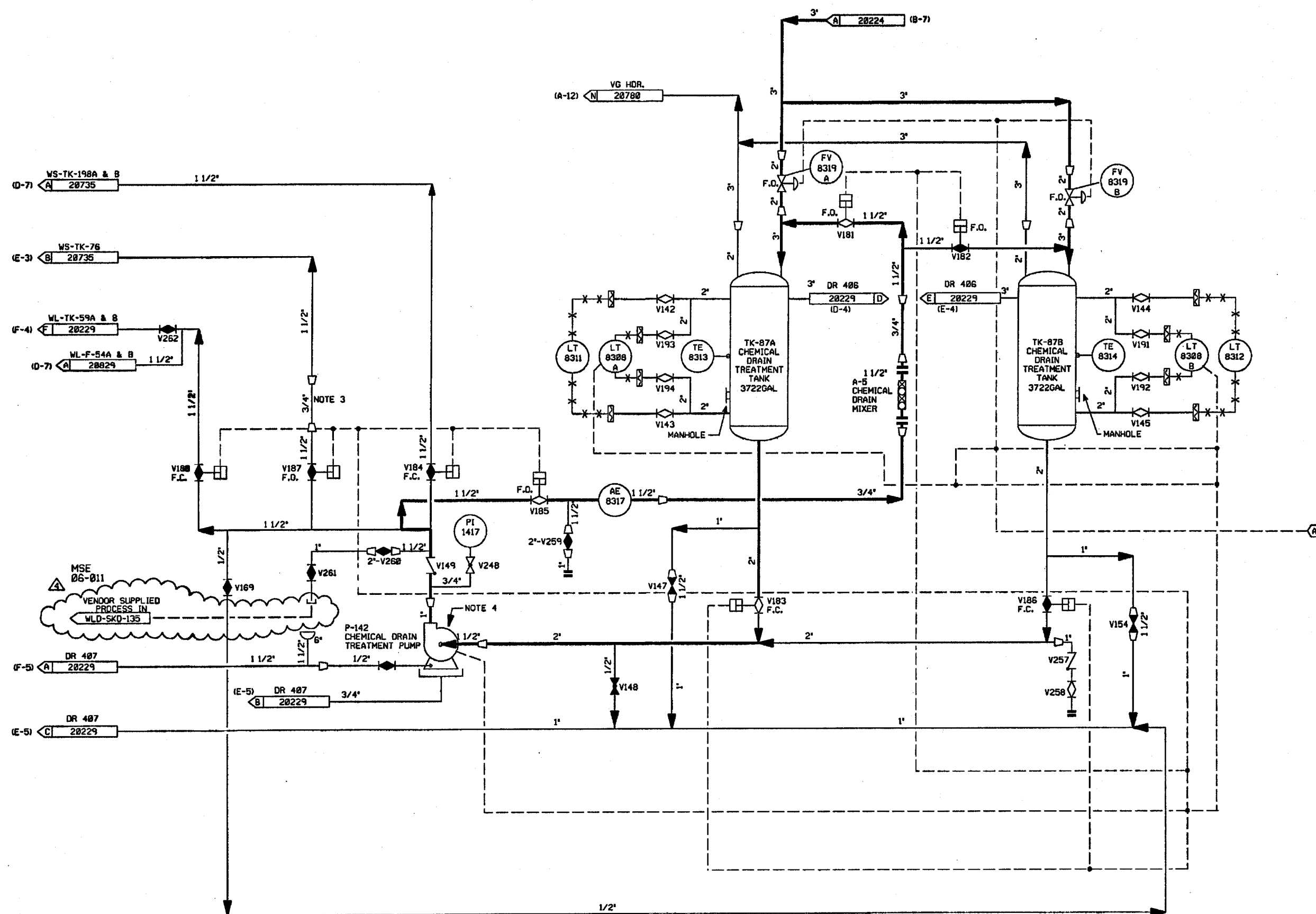
PID- 1-WLD-B20227

REF. DRAWING NO.	REV	TITLE
9763-F-805637	8	STEAM GEN. BLDWN. REC. SHT. 4
9763-F-805633	9	WPB FLR & EQUIP DRAIN SYS SHT 4
9763-F-805634	2	WPB FLR & EQUIP DRAIN SYS SHT 5

10/28/04

PID-1-WLD-B20228

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



INSTRUMENTATION IDENTIFICATION
A TO WLD-LT-8309 & WLD-P-141 ON DWG. B20224.

- NOTES:
1. WORK THIS DRAWING WITH DRAWINGS 20216, 20218, THRU 20227 & 20229.
 2. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS HAVE SYSTEM PREFIX WLD UNLESS NOTED OTHERWISE.
 3. FLOW RESTRICTION PIPE SECTION.
 4. SEE DWG. DM-20353 FOR DM SUPPLY TO MECHANICAL SEALS.
 5. ALL LINES, EQUIPMENT, COMPONENTS, AND INSTRUMENTS ARE SAFETY CLASS N.
 6. Δ INDICATES REVISION LEVEL.

4	1/22/86	BCS	JM	WLD	INCRP MSE 86-011 REV. 00
3	6/30/87	MPW	DWS	RRR	INCRP DCR 86-673 AND DCR 86-266 CAG3.
2	11/18/86	FJR	WRO	RRR	ADDED CONT. FLAG COORD'S. & NOTE 6.
1	4/2/86	GD	JDM	WFD	ISSUED FOR OPERATIONS
0	2/24/85	MLS	JNM	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY

Seabrook Station

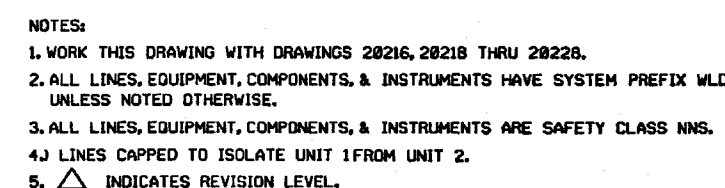


WASTE PROCESSING LIQUID DRAINS
WASTE PROCESSING BUILDING
CHEMICAL DRAIN SYSTEM

PID- 1-WLD-B20228

9763-F-005632	18	CHEMICAL DRN SYSTEM NUCLEAR
REF. DRAWING NO.	REV	TITLE

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



9	6/13/84	BCS	JM	DM	INCRP WMOO 85-524 DCN-82
8	2/2/83	BCS	MPW	JM	INCRP MSE 81-288 REV. 8
7	6/17/78	MRB	BCL	VWS	INCRP DCR 91-322 CAV.
6	1/4/71	PH	JM	BCL	INCRP, DCR 86-558 CA-95; REVISED; NOTE 3
5	6/28/87	MPW	PAL	RRC	ADDED: CNT WDS-87-0013
4	4/7/87	WDS	PAL	VWS	INCRP, DCR 87-0013
3	12/17/86	WDS	PAL	RRC	ADDED: CNT, DCR, COORDS, DRAIN MDS 558, 486 & 528, NOTE 5 AND NOTE FOR P&ID LEGENDS 1 & 2, REVISED CNT, DWTG NUMBERS AND REF. DEVIATIONS, DELETED ALPHA PREFIX FROM DWTG MDS IN NOTE 1.
2	6/16/86	DWS	DWS	RRC	INCRP, ECA 19/161249 & 19/16172A ADDED DM CNT, CORRECTED STRAINER CONFIGURATION.
1	4/2/86	GJ	JM	WFD	ISSUED FOR OPERATIONS
0	3/24/85	GJ	JM	WFD	ISSUED FOR FIELD VERIFICATION
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

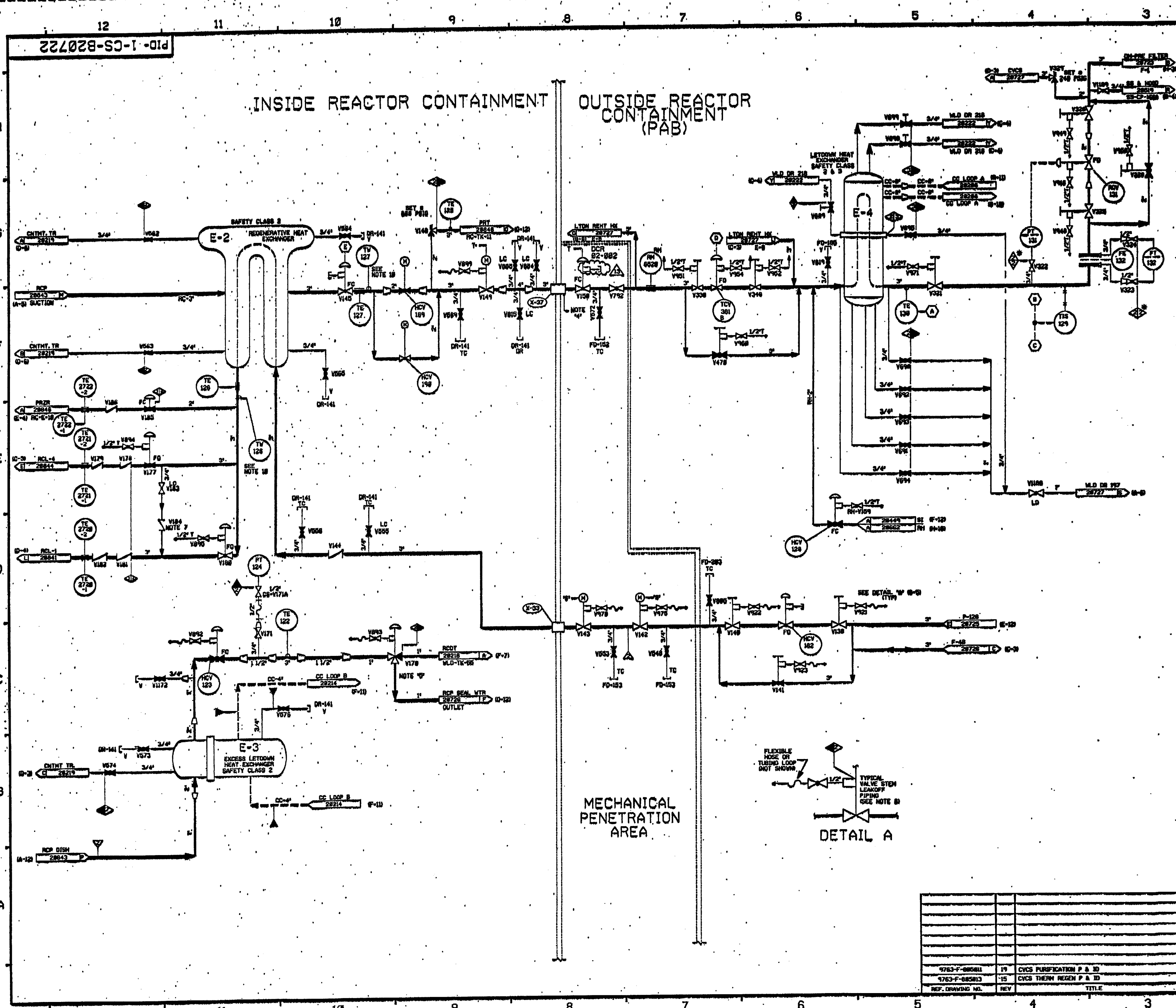
FPL ENERGY Seabrook Station



WASTE PROCESSING LIQUID DRAINS
WASTE PROCESSING BUILDING
SUMPS

PID- 1-WLD-B20229

9763-F-885633	9	WPB FLR. & EQUIP. DRAIN SYS. SHT. 4
9763-F-885619	11	WL STOR. & FILT.
9763-F-885644	1	WPB FLR. & EQUIP. DRAIN SYS. SHT. 2
9763-F-885634	3	WPB FLR. & EQUIP. DRAIN SYS. SHT. 5
REF. DRAWING NO.	REV	TITLE

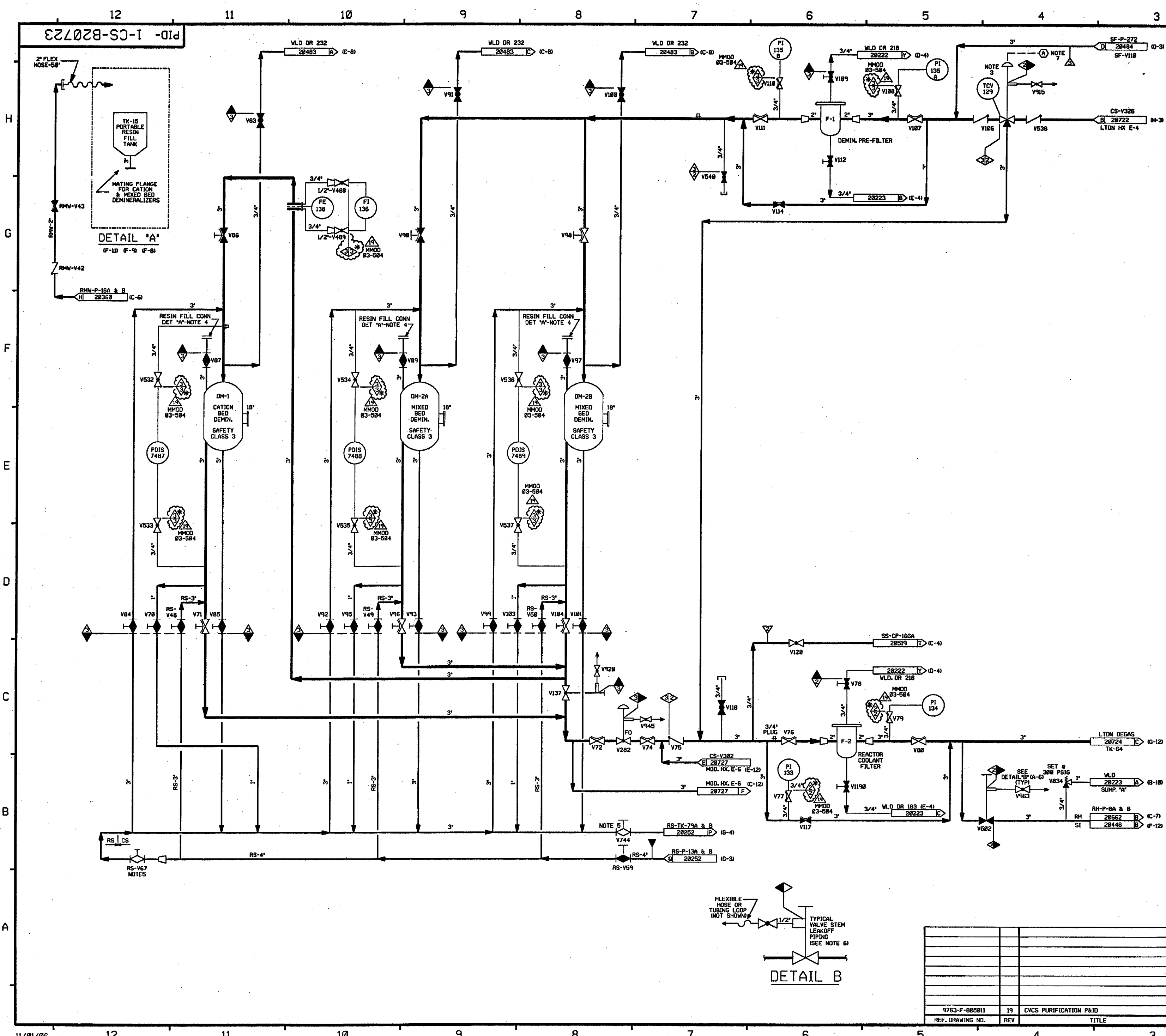


- NOTES:
- 1) WORK THIS DRAWING WITH DWS 20720 & 20723 THRU 20724.
 - 2) ALL LINES, EQUIP., COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX (E, O, L, S, etc.) UNLESS NOTED OTHERWISE.
 - 3) VENT AND DRAIN CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE FOR 1-MIN. SIGNAL UNLESS NOTED OTHERWISE.
 - 4) DELAY TIME SCS TO HERE MUST BE 45 SECONDS MIN.
 - 5) VALVE FAILS WITH FLOW TO SEAL WATER RETURN FILTER.
 - 6) DELETED.
 - 7) SPRING LOADED CHECK VALVE.
 - 8) REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFF.
 - 9) INSTRUMENT REFERENCE.
 - 10) TO CONTROL VALVE TV-120 ON DWS 20720.
 - 11) TO 3-MIN. VALVE TV-121 ON DWS 20723.
 - 12) TO TDS-202 ON DWS 20726.
 - 13) TO TCV-200A, TCV-200, TCV-200 & TCV-200 ON DWS 20727.
 - 14) FOR AUTO CLOSE SIGNALS SEE LOGIC 1-MIN-207307.
 - 15) TV-120 AND TV-127 TO BE ANNOUNCED IN PLACE.

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

NO.	DATE	BY	CHKD	APPD	DESCRIPTION
13	4/2/86	SCS	JM	RMS	INCORP. DCR 82-082 DCR 89
12	10/14/85	SCS	JM	RMS	INCORP. DCR 82-082 DCR 88 & 10000 82-084 DCR 88
11	10/14/85	SCS	JM	RMS	PARTIAL INCORP. DCR 82-082 DCR 89
10	7/12/82	SCS	JM	TAS	INCORP. DCR 82-082 DCR 81, 82, 83
9	6/11/80	NPV	SCS	RMS	INCORP. DCR 82-082 DCR 80
8	5/18/79	DWS	RMS	SCS	INCORP. M100 170000 82-082
7	4/13/72	HRS	SCS	JEV	INCORP. M100 17-015 CAS
6	12/5/71	HRS	PAI	MFD	INCORP. DCR 81-12 CAS
5	5/4/71	HRS	CPH	GRN	INCORP. DCR 81-27 CA 84
4	10/28/67	CPH	DWS	PMS	REVISION NOTE 3
3	11/26/66	HRS	WRO	RAC	ADDED DWS 81-27 CA 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

FPL ENERGY Seabrook Station
CHEMICAL & VOLUME CONTROL SYS
HEAT EXCHANGERS
DETAIL
PID- 1-CS-B20722



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

NOTES:
1. WORK THIS DWG WITH DWGS. 28720, 28722, & 28724 THRU 28729.
2. ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE
SYSTEM PREFIX 'CS', UNLESS NOTED OTHERWISE.
3. VALVE FAILS WITH FLOW BY-PASSING THE DEMINERALIZERS
& GOING TO CS-F-2
4. BLIND FLGS. INSTALLED WITHOUT GASKET
5. THIS VALVE TO BE CLOSED PRIOR TO ANY RESIN
SLUICING OPERATIONS.
6. REFER TO DRAWING VSL-28774 FOR VALVE LEAKOFFS.

7. INSTRUMENT REFERENCE
A LETDOWN EXCHANGER CS-E-4 & CS-E-8 OUTLET TEMP. TIS-129 & TIS-382
ON DWG. 28722

8. VENTS, DRAINS AND TEST CONNECTION CODE BREAKS ARE AT THE
DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-NHY-885111,
UNLESS NOTED OTHERWISE.

9. Δ INDICATES REVISION LEVEL.

10. DELETED

11. DELETED

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

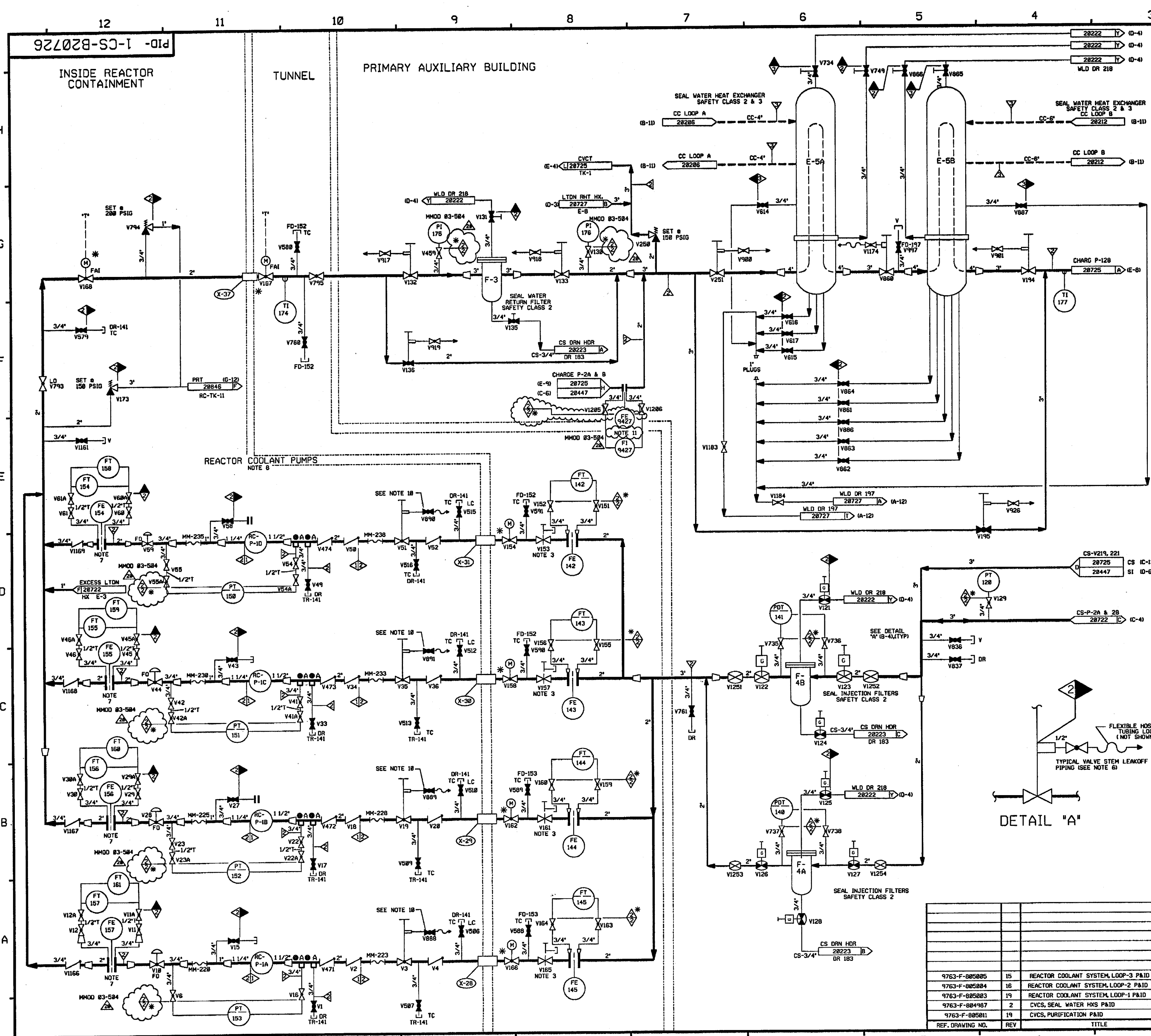
19	11/2/88	JM	BCS	RPM	INCORP. MMOD 83-584 DCR 88
18	6/12/88	BCS	DWS	RWM	INCORP. DCR 99-18 DCR 88
17	1/18/97	MPW	BCS	RWB	PARTIAL INCORP. DCR 99-18 DCR 88
16	3/21/96	BCS	DWS	RJB	INCORP. MMOD 948574 CA#01
15	2/28/96	DWS	BCS	VWS	INCORP. MMOD 948574 CA#0
14	3/4/94	MRB	BCL	GRM	INCORP. MMOD 92-553, CA#1
13	4/6/93	BCL	MPW	WFZ	MMOD 91-587, CA#
12	4/13/92	MRB	BCL	JEV	MMOD 91-515, CA#
11	18/8/91	MRB	JM	ES	INCORP. MMOD 91-511 CA# AND MMOD 91-525, CA#
10	2/26/91	MRB	RMC	BCL	INCORP. MMOD 90-648 CA#1
9	3/24/90	MRB	BMC	BCL	INCORP. MMOD 90-516 CA#
8	5/24/89	MRB	GPM	RRC	INCORP. DCR 87-264 CA 89 REVISED, NOTE 2
7	5/25/88	GPM	APL	DJM	INCORP. DCR 87-323 REVISED PIPING PER AS INSTALLED CONF. VALVE POSITION PER DWG. 585272 ADDED DETAIL B, NOTE AT CS-V563 & CLASS DESIGNATION DELETED REF. DWG. N5-1 CL BOUNDARY
6	3/28/87	MRJ	MDS	RRC	ADDED 3" AND FLANGE PER ECA 99-116756A ADDED NOTE AND DWG COORDS. FOR DETAIL A, ADDED CONT FLAG LETTERS AND NOTE 9, DELETED DETAIL 'B'.
5	12/12/86	JDM	PAL	RRC	INCORP. ECA 99/116756A
4	10/17/86	MAP	VRD	RRC	ADDED DWG LOC. COORD. DELETED CLASS BREAKS & CODE BREAKS ADDED NOTE 8 REVISED TO CLARIFY DUPLICATION OF ASSOCIATED SYSTEMS.
3	8/22/86	MPW	GRD	PHH	REINCORP. ECA 99/116756A, INCORP. NCR 82/117-1, DCR 86/177A, ADDED VALVES R4-V562, T440, V568, ADDED VALVE V569 PER P-71222, CORRECTED CONTINUATIONS & REV PER AS-BUILT CONFIG.
2	6/23/86	MES	DWS	RRC	INCORP. ECA 99/116756A, 19/18849A, INCORP. 865811-REV 19
1	1/22/86	DWS	JDM	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY Seabrook Station

CHEMICAL & VOLUME CONTROL SYS.
PURIFICATION
DETAIL

PID- 1-CS-B20723

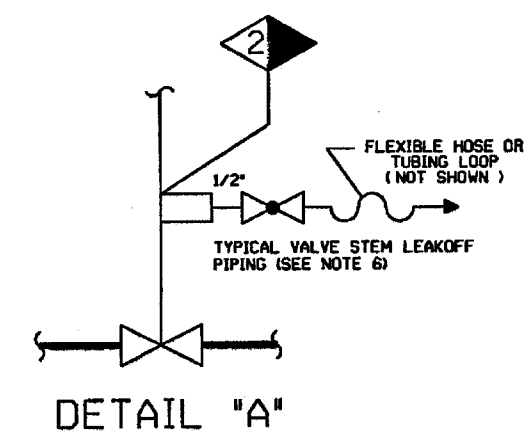
9763-F-885811	19	CVCS PURIFICATION P&ID
REF. DRAWING NO.	REV	TITLE



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. WORK THIS DWG WITH DWGS. 28720, 28722 THRU 28725 & 28727 THRU 28729.
 2. ALL PIPING, VALVES, EQUIP. & INSTRUMENTS HAVE SYSTEM PREFIX 'CS', UNLESS NOTED OTHERWISE.
 3. 2" NEEDLE VALVE WITH 1" INTERNALS.
 4. * INDICATES 3/8" FLOW RESTRICTOR INSTALLED. SEE APPLICABLE DETAIL ON DWG RC-28846.
 5. VENTS, DRAINS & TEST CONN. CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-MW-58811, UNLESS NOTED OTHERWISE.
 6. REFER TO DRAWING VSL-28774 FOR VALVE LEAKOFFS.
 7. ORIFICE PLATE IS NON-ASME.
 8. REACTOR COOLANT PUMPS SHOWN ON DWG'S.
 9. Δ INDICATES REVISION LEVEL.
 10. VALVE STEM LEAK-OFF ISOLATION VALVES V888, V889, V890 & V891 ARE TO BE MAINTAINED CLOSED. VALVE STEM LEAK-OFF TO BE CONSIDERED INOPERABLE.
 11. NON-ASME FLOW ELEMENT. MMOD 83-584

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED



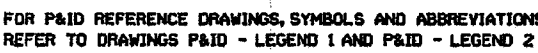
REV	DATE	DSGN	CHKD	CE	DESCRIPTION
28	9/22/06	BCS	JM	PJT	INCCORP MMOD 83-584 DCN-88
19	4/23/99	DWS	BCS	GRM	INCCORP DCR 980845 DCN-84
18	7/1/97	MPW	DWS	JEV	DCR 980807 CA-88 (FINAL)
17	6/13/97	DWS	MPW	JEV	INCCORP DCR 970808 DCN-88 & DCR 980807 CA-88 (PARTIAL)
16	5/16/97	MPW	DWS	WFZ	INCCORP DCR 97-16 CA-8
15	2/25/97	BCS	MPW	RCP	INCCORP DCR 94-46 CA-8
14	11/28/96	MPW	BCS	RBB	INCCORP DCR 88-118 CA-8
13	4-24-94	BCL	MPW	MMOD	INCCORP MMOD-93-517 CA-8
12	4-5-93	BCL	MPW	WFZ	INCCORP MMOD-91-587 CA-8

FPL ENERGY Seabrook Station

CHEMICAL & VOLUME CONTROL SYS.
SEAL WATER
DETAIL

PID- 1-CS-B20726

REF. DRAWING NO.	REV	TITLE
9763-F-805805	15	REACTOR COOLANT SYSTEM, LOOP-3 P&ID
9763-F-805804	16	REACTOR COOLANT SYSTEM, LOOP-2 P&ID
9763-F-805803	19	REACTOR COOLANT SYSTEM, LOOP-1 P&ID
9763-F-804987	2	CVCS, SEAL WATER HXS P&ID
9763-F-805801	19	CVCS, PURIFICATION P&ID



1. WORK THIS DWG WITH 287270 THRU 287274 & 28728 THRU 28729.
PORTIONS OF THIS DRAWING ARE DUPLICATED ON DRAWING SI-28447
DUE TO LATE SYSTEM FUNCTIONS.
2. ALL LINES, EQUIPMENT COMPONENTS & INSTRUMENTS HAVE
SYSTEM PREFIX "CS", UNLESS NOTED OTHERWISE.
3. MIN. OF 5' OF STRAIGHT RUN AFTER MIN. FLOW ORFICE.
4. PERMANENT SPOOL. PIECE INSTALLATION SHOW DRIP.
SPOOL PIECE WITH STRAINER, PRESSURE INSTRUMENTS,
VENTS & DRAINS IS SHOWN ONLY DURING FLUSHING
OPERATIONS. IS REMOVED BEFORE START-UP.
5. VENT AND DRAIN COE BREAKS ARE AT THE DOWNSTREAM
END OF THE OUTER ISOLATION VALVE PER I-NH-88511 UNLESS
NOTED OTHERWISE.
6. REFER TO DRAWING YSL-28774 FOR VALVE LEAKOFFS.
7. ORFICE PLATE NON-ASME
8. INSTRUMENT REFERENCE

A	TO LV-112A & LV-112A ON DWG. 28724.
B	TO PG-PIC-8158 ON PAID WG-28773
C	TO LV-112E & LV-112D ON DWG. 28723.
9. Δ INDICATES REVISION LEVEL.

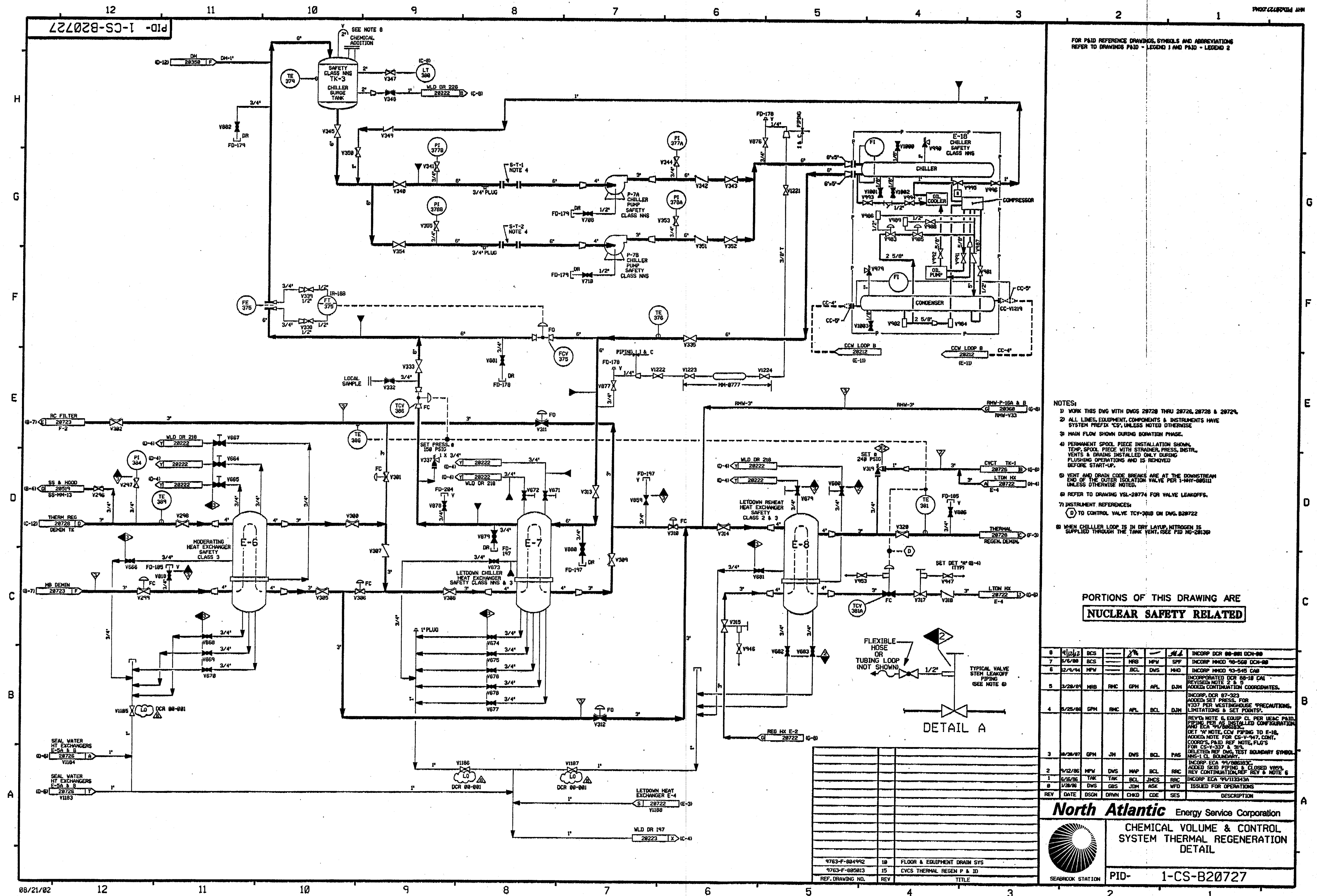
PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

25	2/10/03	BCS	JM	MPW	REINCPOR, MSE 02-312 REV. 00
24	3/07/03	BCS	JM	MPW	INCPOR, MSE 02-312 REV. 00
23	5/12/02	MPW	JM	RRB	PARTIAL INCPOR, DCR 02-0032 DCM 00
22	8/08/01	JM	BCS	RRB	INCPOR, DCR 98-0046 DCM 00
21	4/05/01	BCS	MPW	RRB	PARTIAL INCPOR, DCR 98-0046 DCM 00
20	11/7/00	BCS	MPW	RRB	INCPOR, DCR 98-0052 DCM 00
19	11/2/00	MPW	BCS	RRB	INCPOR, DCR 99-0018 DCM 00
18	10/10/00	BCS	MPW	PA	INCPOR, DCR 99-0036 DCM-00
17	10/13/00	BCS	MPW	JCM	INCPOR, MM40 99-597 DCM-00
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

Seabrook Station

CHEMICAL & VOLUME CONTROL CHARGING SYSTEM DETAIL

PID-	1-CS-B20725
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FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

NOTES:

- 1) WORK THIS DWG WITH DWGS 28729 THRU 28726, 28728 & 28724.
- 2) ALL LINES, EQUIPMENT, COMPONENTS & INSTRUMENTS HAVE SYSTEM PREFIX 'CS', UNLESS NOTED OTHERWISE
- 3) MAIN FLOW SHOWN DURING BORATION PHASE.
- 4) PERMANENT SPOOL, PIECE INSTALLATION SHOWN, TEMP. SPOOL, PIECE WITH STRAINER, PRESS. INSTR., VENTS & DRAINS INSTALLED ONLY DURING FLUSHING OPERATIONS AND IS REMOVED BEFORE START-UP.
- 5) VENT AND DRAIN CODE BREAKS ARE AT THE DOWNSTREAM END OF THE OUTER ISOLATION VALVE PER 1-INCH-806111 UNLESS OTHERWISE NOTED.
- 6) REFER TO DRAWING YSL-28774 FOR VALVE LEAKOFFS.
- 7) INSTRUMENT REFERENCES:
 - (D) TO CONTROL VALVE TCV-3818 ON DWG. B29722
- 8) WHEN CHILLER LOOP IS IN DRY LAYUP, NITROGEN IS SUPPLIED THROUGH THE TANK VENT, SEE FIG. NY-281361

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

8	9/12/72	BCS		Y/N	—	SL	INCORP DCR 88-281 DCR-28
2	5/6/68	BCS		MRL	MPW	SFO	INCORP INMCO 88-568 DCR-28
6	2/4/74	MPW		BCL	DWS	MPH	INCORP INMCO 93-545 CAB
5	3/28/84	MRL	RMC	GPM	APL	DJM	INCORPORATED DCR 88-18 CMI REVISED NOTE 2 & 3 ADDED CONTINUATION COORDINATES.
4	5/25/68	GPM	RMC	APL	BCL	DJM	INCORP DCR 87-323 ADDED SE PRESS. FOR NOTES FOR WESTINGHOUSE PRECAUTIONS. LIMITATIONS & SET POINTS.
3	10/28/67	GPM	JM	DWS	BCL	PMS	REV'D NOTE 6 EQUIP CL PER IEAC PAID. PIPING PER AS INSTALLED CONFIGURATION AND ECA 94/981830. DET "A" NOTE, CCW PIPING TO E-16, ADDED NOTE FOR CS-V-947, CONT. COORDS, PAID REF NOTE, FLUGS FOR CS-V-337 & 34. DELETED REF NOTE SET BOUNDARY SYMBOL NMS-1 CL BOUNDARY.
2	9/12/85	MPW	DWS	MAP	BCL	RRC	INCORP ECA 94/981830 ADDED SCW PIPING & ADDED VESS. REV CONTINUOUSLY. REV & NOTE 6
1	6/8/86	YAK	TAK	DCL	JMCS	RBC	INCORP ECA 94/13343A
0	1/28/86	DWS	GBS	JDM	ASK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SECS	DESCRIPTION

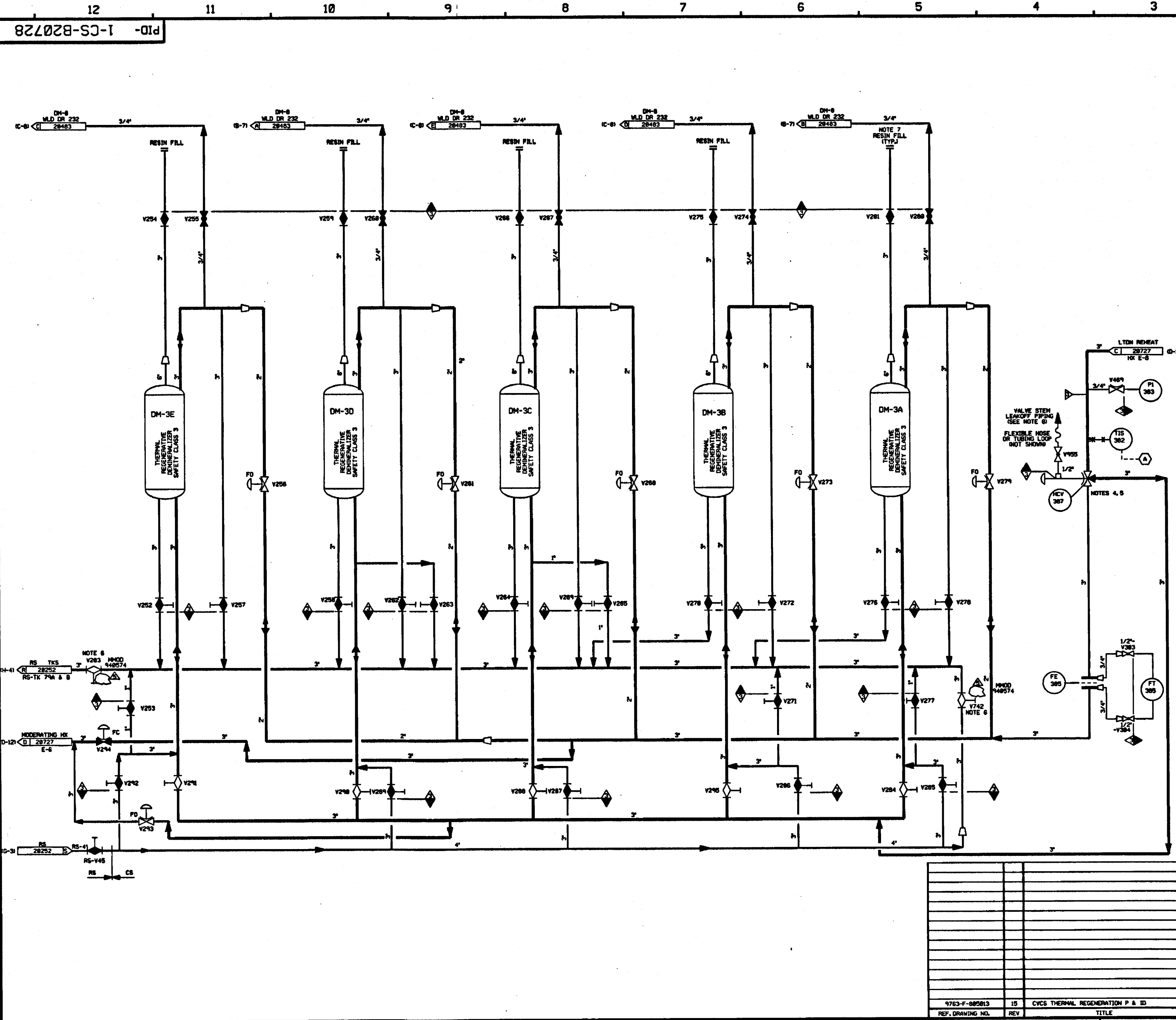
North Atlantic Energy Service Corporation

CHEMICAL VOLUME & CONTROL SYSTEM THERMAL REGENERATION DETAIL



SEABROOK STATION

PID- 1-CS-B20727



FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2

- NOTES:
- 1) WORK THIS DWG WITH DWGS 28728, 28722 THRU 28727 & 28729.
 - 2) ALL PIPING, VALVES, EQUIPMENT & INSTRUMENTS HAVE SYSTEM PREFIX 'CS' UNLESS NOTED OTHERWISE.
 - 3) MAIN FLOW IS SHOWN IN THE BORATION PHASE.
 - 4) ALL VALVES ALIGNED FOR BORON REMOVAL CIRCULATION.
 - 5) FAILS TO BORON RELEASE POSITION (BORATION).
 - 6) THESE VALVES TO BE CLOSED PRIOR TO ANY RESIN SLICING OPERATIONS.
 - 7) INSTALLED BLIND FLANGES WITHOUT GASKET.
 - 8) REFER TO DRAWING VSL-28774 FOR VALVE LEAKOFFS.
 - 9) INSTRUMENT REFERENCES:
 - A TO THERMOWELL TIS-129 ON DWG 28722

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

5	2/28/76	SCS	—	DAJS	PAH	2/28	INCORP 4400 948574 CAPBL
4	2/28/76	DWS	—	SCS	WPD	2/28	INCORP 4400 948574 CAPBL
3	2/28/76	WBS	—	BCL	WKS	2/28	INCORP 4400 948574 CAPBL
2	8/21/87	CPH	—	HIV	BCL	WBS	REV'D NOTE 1, 2 & 3. REF DWG REV NO. 1. ADDED PAID REF DWG NOTE CONT. CORRUPT & NOTES FOR VLV V273 DELETED. REF DWG 4400-1 CL. BOUNDARY.
1	8/22/88	BCL	—	TAK	WPD	PHH	ADDED CONTINUATION DETAILS, REVISED VALVE TYPE AND NOTE 8.
8	1/28/88	DWS	—	GJK	JDM	ASK	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

North Atlantic Energy Service Corporation

**CHEMICAL VOLUME & CONTROL SYS
THERMAL REGENERATION
DETAIL**

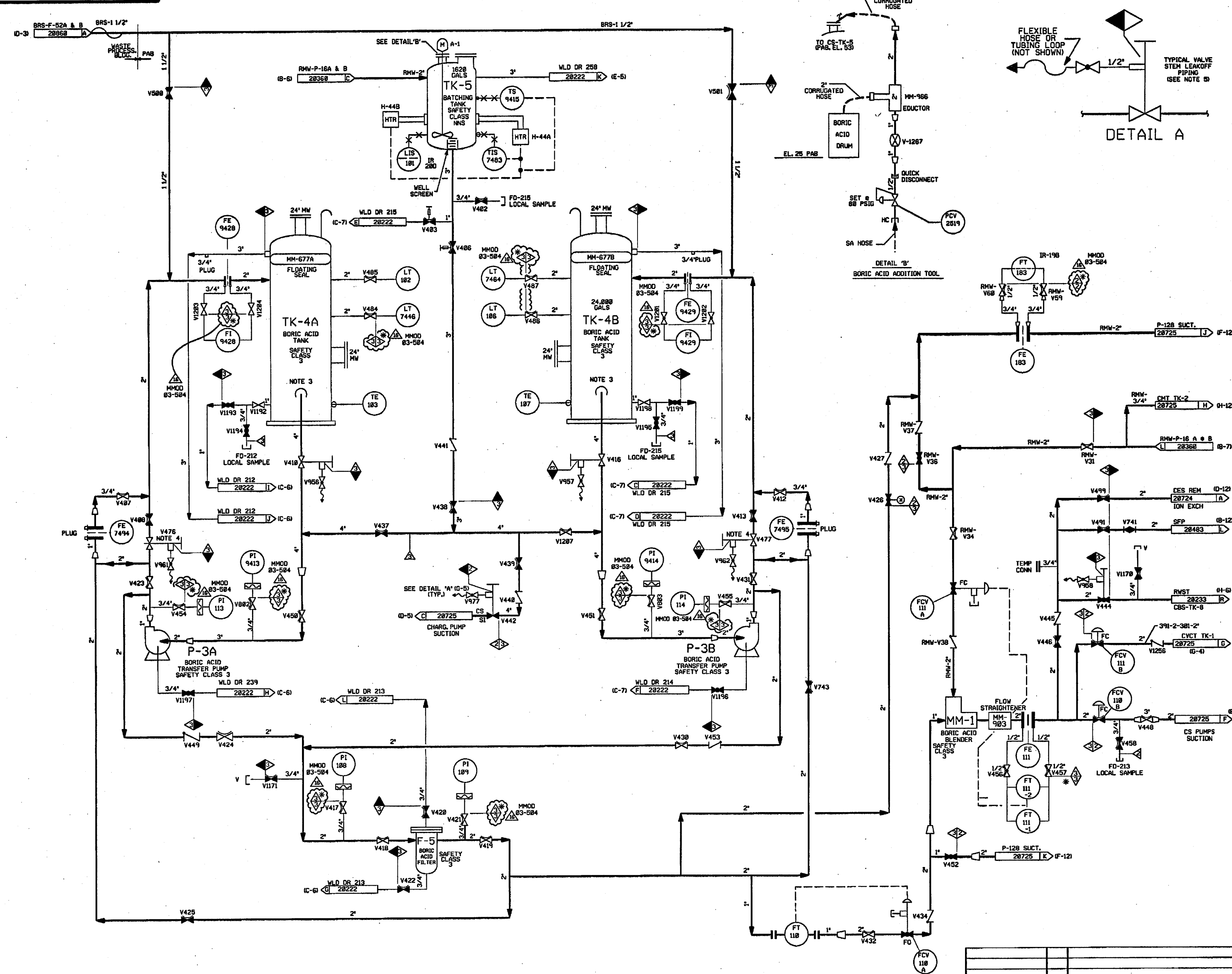
PID- 1-CS-B20728

9763-F-085813	15	CVCS THERMAL REGENERATION P & ID
REV. DRAWING NO.	REV.	TITLE

83/28/96

PID-1-CS-B20729

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



- NOTES:
1. WORK THIS DWG WITH 20720 & 20722 THRU 20728.
 2. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX CS, UNLESS NOTED OTHERWISE.
 3. ALL BORIC ACID & BATCHING TANK EQUIP & PIPING SHOWN IS LOCATED IN AREA MAINTAINED AT A CONTROLLED TEMPERATURE.
 4. VALVE IS LOCKED INTO POSITION DURING OPERATIONAL TESTING TO LIMIT PUMP RUNOUT TO 75 GPM WHEN TRANSFERRING BATCHING TANK CONTENTS TO BORIC ACID TANK.
 5. REFER TO DWG VSL-20774 FOR VALVE LEAKOFFS.
 6. DELETED

PORTIONS OF THIS DRAWING ARE
NUCLEAR SAFETY RELATED

16	11/14/96	JM	BS	AB	INCORP MMOD 83-504 DCM 00
15	1/27/85	BS	JM	RRB	INCORP CR 85-00034 REV. 00
14	10/16/83	BS	MPW	RRB	INCORP DCR 82-013 DCM-00, 01, 02
13	8/27/83	BS	JM	MR	INCORP MMOD 83-515 DCM-00
12	5/12/83	JM	MPW	BS	INCORP CR 82-07592 REV. 00
11	4/22/99	DWS	RWS	GRM	INCORP DCR 980052 DCM-00 DCR 980045 DCM-00 & REINCORPORATED DCR 980039 DCM-00
10	9/16/97	BS	MPW	BAW	INCORP DCR 95-30 DCM 03
9	6/13/97	MPW	DWS	WNF	INCORP DCR 95-30 DCM 00
8	10/8/92	DWS	MRB	DMP	INCORP DCR 890073 CA#0 & 1
7	4/28/92	MRB	BCL	RRB	INCORP MMOD 91-515 CA#0
6	12/16/91	FCB	RMC	BCL	INCORP MMOD 91-515 CA#0
5	3/18/89	MRB	GPM	MJY	INCORPORATED DCR 88-142 CA#0 REVISED NOTE 2, V403 & V406 OPERATOR SYMBOL
4	12/15/87	GPM	DWS	PAG	REVISED NOTE 5, VALVE NO. ADDED FLS AT FT110, PLUGS AT 7494 & 7495, NOTE FOR V403, CONT. COORD'S CLASS DESIGNATION, PAID REF DWG NOTE & USE: PAID REF DWG DELETED REF DWG, NNS-1 CL BOUNDARY, REDUNDANT SYS DWS CONT.
3	10/8/86	JDM	MAP	RRR	INCORP ECA'S 88/118317A & 88/118448A
2	8/22/86	BCL	WRD	PHH	REVISED TO REFLECT AS-BUILT CONFIGURATIONS, ADDED HEAT TRACING & CONTINUATION REF. REVISED NOTE 5.
1	6/13/86	JDM	DWS	RRR	UPDATE REF DWG REV NO. & REVISE ACCORDINGLY, INCORP ECA 82/1745 REVISED, RMV SUPPLY TO TK-1, INCORP ECA 94/12018A & ECA 94/800202B.
0	1/22/86	DWS	JDM	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY Seabrook Station

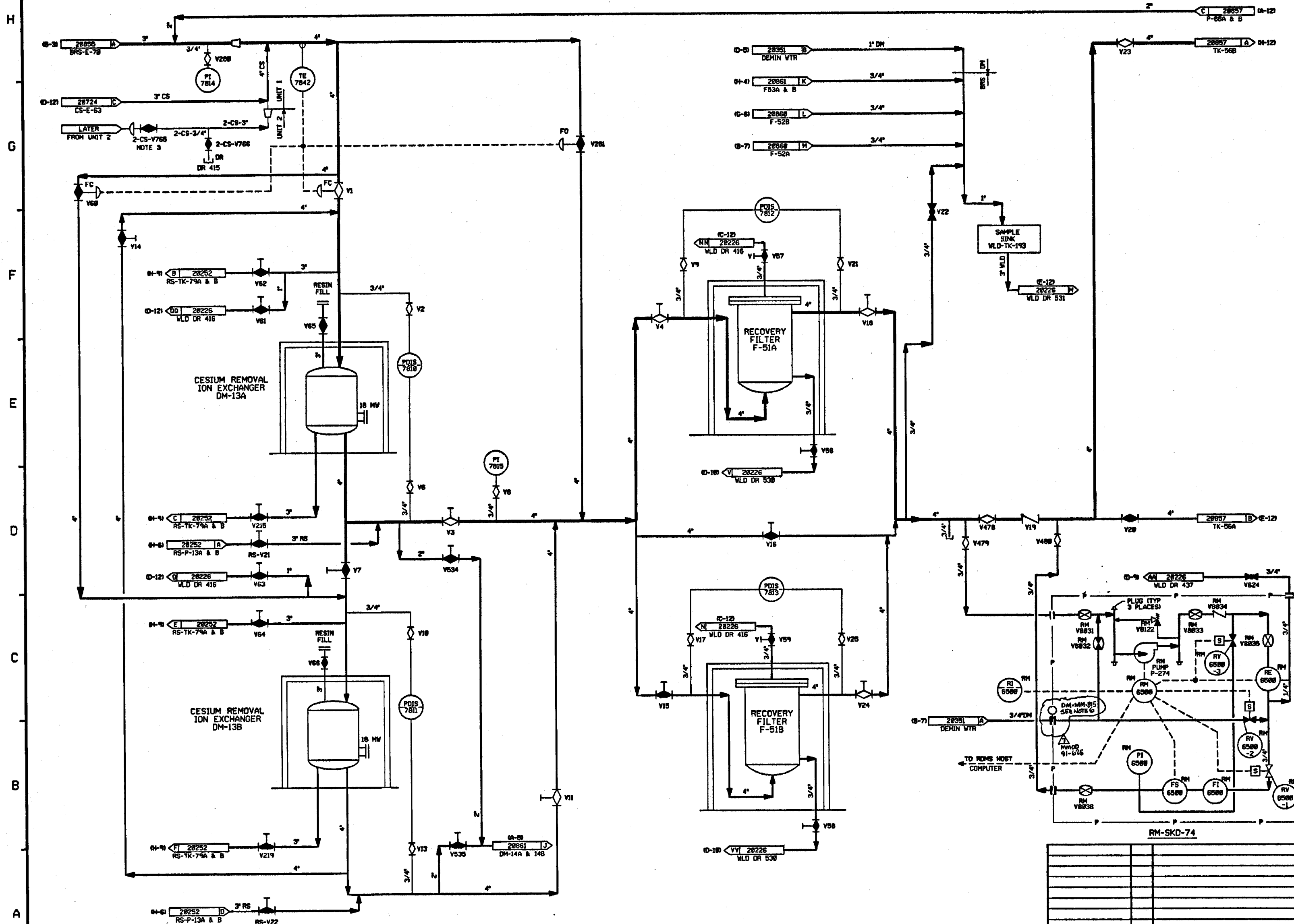
**CHEMICAL & VOLUME CONTROL SYS.
BORIC ACID
DETAIL**

PID- 1-CS-B20729

REF. DRAWING NO.	REV	TITLE
9763-F-805017	12	SPENT FUEL POOL COOLING & CLEAN-UP
9763-F-805014	16	CVCS BORIC ACID P & ID

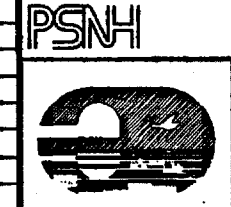
PID-1-BRS-B20856

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "BRS" UNLESS NOTED OTHERWISE.
 2. WORK THIS DWS WITH DWS'S 28053, 28054, 28055, 28057, 28058, 28059, 28060 & 28061.
 3. VALVE IS CLOSED DURING UNIT 2 CONSTRUCTION
 4. Δ INDICATES REVISION LEVEL
 5. ALL LINES, EQUIPMENT, COMPONENTS AND INSTR. ARE SAFETY CLASS UNLESS NOTED OTHERWISE.
 6. SPECTACLE FLANGE SHOWN IN NORMAL POSITION
REVERSED ONLY DURING PURGING OPERATIONS

7	10/07/91	MRB	FCB	JJA	APL	ES	INCORP. HMOD 91-625 CMB
6	9/18/91	GPH	FCB	JH	MRB	MAC	INCORP. DCR 98-14 CMB
5	2/28/91	MRB	FCB	RMC	APL	BCL	INCORP. HMOD 98-648 CMB
4	10/29/90	MRB	FCB	JH	APL	BCL	INCORP. HMOD 98-581 CMB ADDED NOTE 5 FOR INFORMATION
3	12/12/89	HPW	DWS	PAI	BCL	RRC	ADDED CONT. REF. LOC'S VALVE RM V8122 PER FP-71262 AND NOTE 4.
2	9/26/89	HAP	DWS	JDM	BCL	RRC	ADDED VALVING & INSTRUMENT INFO FOR RM-SKD-74 PER FP-71262. REVISED DWS CONTINUATION DELETED REF. DWS 8/A.
1	6/23/89	GD	SKN	DWS	JMS	RRC	INCORP. ECA 19/0802A & 19/0802B ITEM #1 RESOLVED PER ECA 19/082019A
0	1/13/89	GD	SKN	JDM	ASF	WPD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION



PUBLIC SERVICE OF NEW HAMPSHIRE

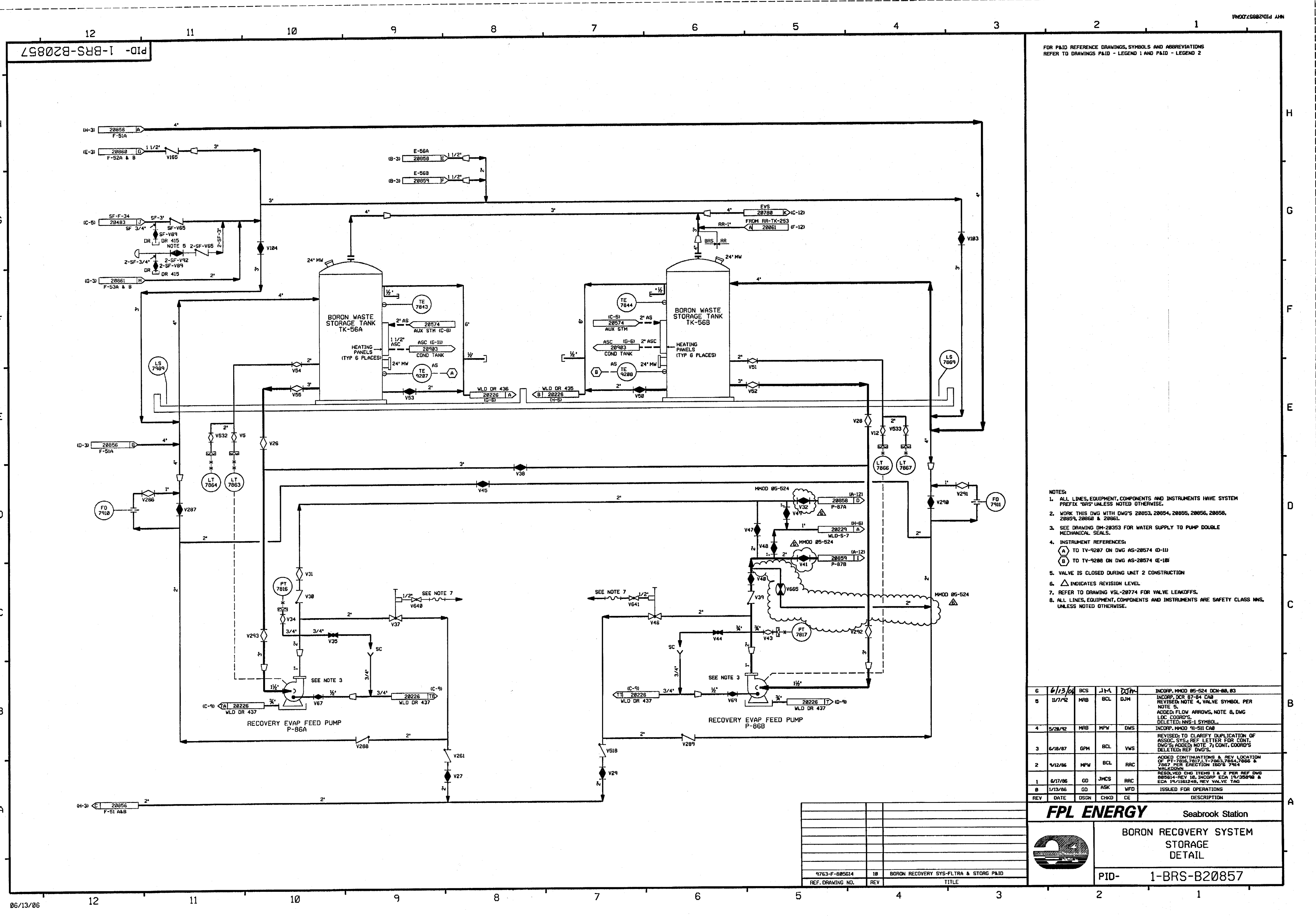
BORON RECOVERY SYSTEM
FILTRATION
DETAIL

SEABROOK STATION

PID-1-BRS-B20856

7	10/07/91	MRB	FCB	JJA	APL	ES	INCORP. HMOD 91-625 CMB
6	9/18/91	GPH	FCB	JH	MRB	MAC	INCORP. DCR 98-14 CMB
5	2/28/91	MRB	FCB	RMC	APL	BCL	INCORP. HMOD 98-648 CMB
4	10/29/90	MRB	FCB	JH	APL	BCL	INCORP. HMOD 98-581 CMB ADDED NOTE 5 FOR INFORMATION
3	12/12/89	HPW	DWS	PAI	BCL	RRC	ADDED CONT. REF. LOC'S VALVE RM V8122 PER FP-71262 AND NOTE 4.
2	9/26/89	HAP	DWS	JDM	BCL	RRC	ADDED VALVING & INSTRUMENT INFO FOR RM-SKD-74 PER FP-71262. REVISED DWS CONTINUATION DELETED REF. DWS 8/A.
1	6/23/89	GD	SKN	DWS	JMS	RRC	INCORP. ECA 19/0802A & 19/0802B ITEM #1 RESOLVED PER ECA 19/082019A
0	1/13/89	GD	SKN	JDM	ASF	WPD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CE	LDE	DESCRIPTION

783-F-805614 10 BORON RECOVERY SYS FILTR & STOR P&ID
REF. DRAWING NO. REV TITLE

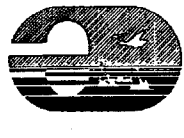


FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "BRS" UNLESS NOTED OTHERWISE.
 2. WORK THIS DWG WITH DWG'S 28053, 28054, 28055, 28056, 28058, 28059, 28060 & 28061.
 3. SEE DRAWING DM-28353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
 4. INSTRUMENT REFERENCES:
(A) TO TV-9287 ON DWG AS-28574 (D-11)
(B) TO TV-9288 ON DWG AS-28574 (E-18)
 5. VALVE IS CLOSED DURING UNIT 2 CONSTRUCTION
 6. Δ INDICATES REVISION LEVEL
 7. REFER TO DRAWING VSL-28774 FOR VALVE LEAKOFFS.
 8. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS, UNLESS NOTED OTHERWISE.

6	6/13/04	BCS	JLA	DJM	INCORP. MMOD 85-524 DCH-88, 83
5	11/7/92	MRB	BCL	DJM	INCORP. DCR 87-84 CAB REVISED NOTE 4, VALVE SYMBOL PER NOTE 5. ADDED: FLOW ARROWS, NOTE 6, DWG LDC COORDS. DELETED: NMS-1 SYMBOL.
4	5/28/92	MRB	MPW	DMS	INCORP. MMOD '91-511 CAB
3	6/18/87	GPH	BCL	VWS	REVISED TO CLARIFY DUPLICATION OF ASSOC. SYS. REF. LETTER FOR CONT. DWG'S. ADDED NOTE 7, CONT. COORDS. DELETED: REF. DWG'S.
2	4/12/86	MPW	BCL	RAC	ADDED CONTINUATIONS & REV. LOCATION OF PT-7815, 7817, 7853, 7854, 7866 & 7867 FOR ERECTION 180'S 7814 VALVE DOWN.
1	6/17/86	GO	JMCS	RAC	REDESIGNED DWG ITEMS 1 & 2 PER REF DWG 885614-REV 10, INCORP. ECA 19/35898 & ECA 19/181248, REV. VALVE TAG.
0	1/13/86	GO	ASK	WFO	ISSUED FOR OPERATIONS
REV	DATE	DSGN	CHWD	CE	DESCRIPTION

FPL ENERGY Seabrook Station



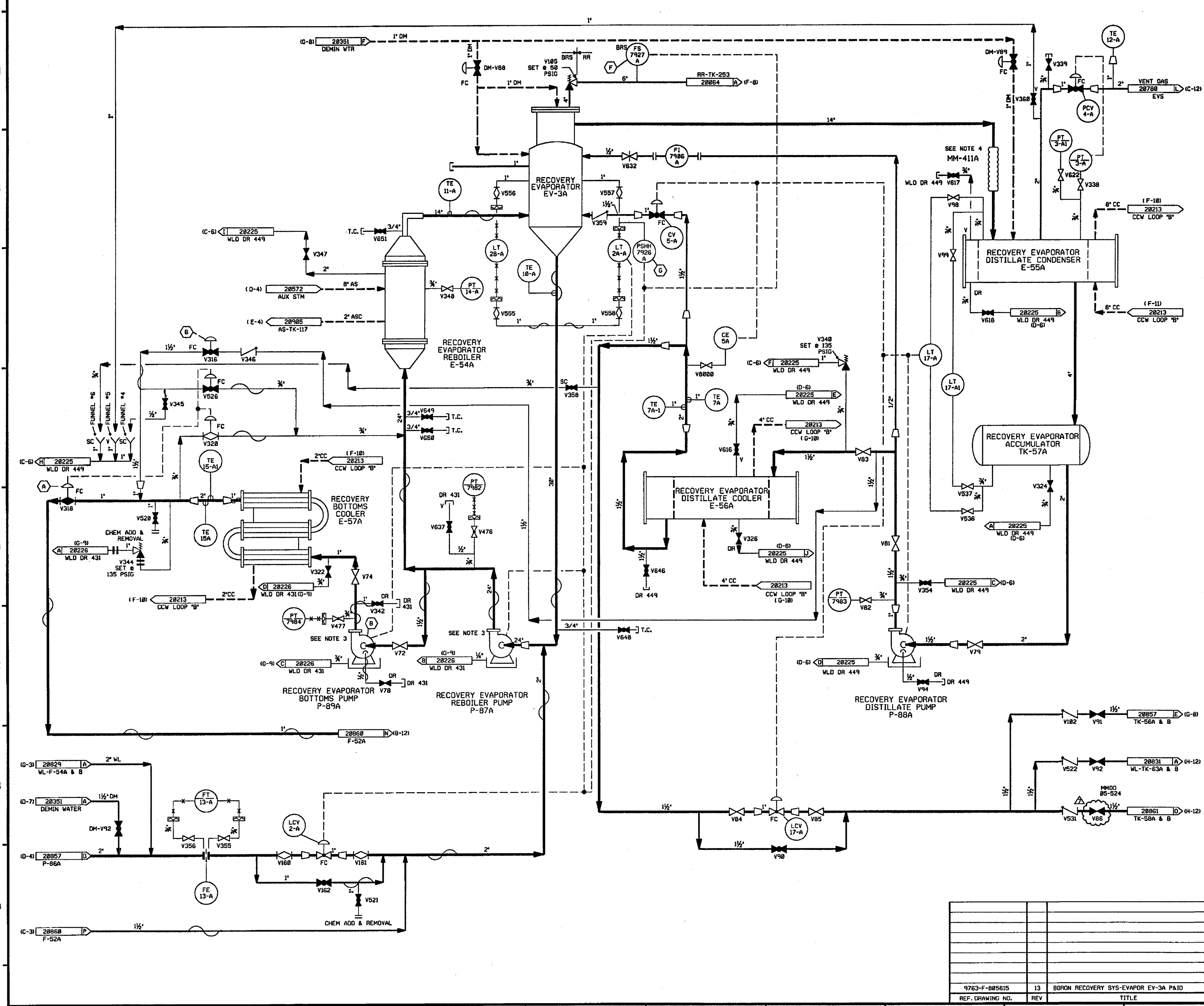
BORON RECOVERY SYSTEM
STORAGE
DETAIL

PID- 1-BRS-B20857

9763-F-885614	18	BORON RECOVERY SYS-FLTRA & STORG P&ID
REF. DRAWING NO.	REV	TITLE

PID-1-BRS-B20858

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID-LEGEND 1 AND P&ID-LEGEND 2.



- NOTES:
- 1) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 'BRS' UNLESS NOTED OTHERWISE.
 - 2) WORK THIS DWG WITH DWG'S 20853, 20854, 20855, 20856, 20857, 20859, 20860 & 20861.
 - 3) SEE DWG DM-28353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
 - 4) ENTIRE LINE IS FLEX CONN.
 - 5) INSTRUMENT REFERENCES:
 - (A) HIGH E-57A OUTLET TEMP. HIGH WS-TK-76 LEVEL AND LOW EV-38 LEVEL WS-TK-76 TRANSFER VALVE INTERLOCK.
 - (B) BRS-P-89A, DISTILLATE FLUSH V316 INTERLOCK.
 - (C) TO 1-DM-V88 ON DWG DM-28351 (H-7) & 1-BRS-FCV-1A ON DWG AS-20572 (D-6).
 - (D) TO 1-DM-V88 ON DWG DM-28351 (H-7) & 1-BRS-FCV-1A ON DWG AS-20572 (D-6).
 - 6) Δ INDICATES REVISION LEVEL.
 - 7) ALL LINES, EQUIPMENT COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NWS UNLESS NOTED OTHERWISE.

7	6/13/04	BCS	JM-4	DJM	INCORP MMDD 05-524 DCN-83
6	12/7/92	MRB	DWS	DJM	INCORP DCR 87-84 CA 28
5	11/7/92	MRB	BCL	DJM	INCORP DCR 87-84 CA8
					INCORP DCR 86-634 CA8 REVISED VALVE POSITION PER NHY PID DM-28351 ADDED LINE SIZE FOR CLARITY DELETED REDUNDANT INTERFACE INFO. & VALVE DIAPHRAGM SYMBOL PER UE&C PID 9763-F-805615
4	12/18/91	MRB	JM	GRM	INCORP DCR 86-587, CORRECTED DRAWING ERRORS. REVISED NOTE 7.
3	9/18/87	JDM	BCL	RRC	RE-INCORP ECA 86/116967A, ADDED V8800 CONTINUATION FLAG REF'S & NOTE 6. REVISED TUBING SYMBOL FOR PT-7982 PER UE&C P&ID AND CONTINUATION FLAG REF. ADDED P&ID LEGEND NOTE.
2	10/3/86	MRJ	BCL	RRC	INCORP ECA 86/116967A & 19/116983C ADDED REDUCER & FLANGS. CHANGE ITEM Δ RESOLVED PER LATEST UE&C P&ID
1	8/24/88	JDM	JNK	RRC	ISSUED FOR OPERATIONS
0	1/13/86	GD	JDM	WFD	
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

FPL ENERGY Seabrook Station

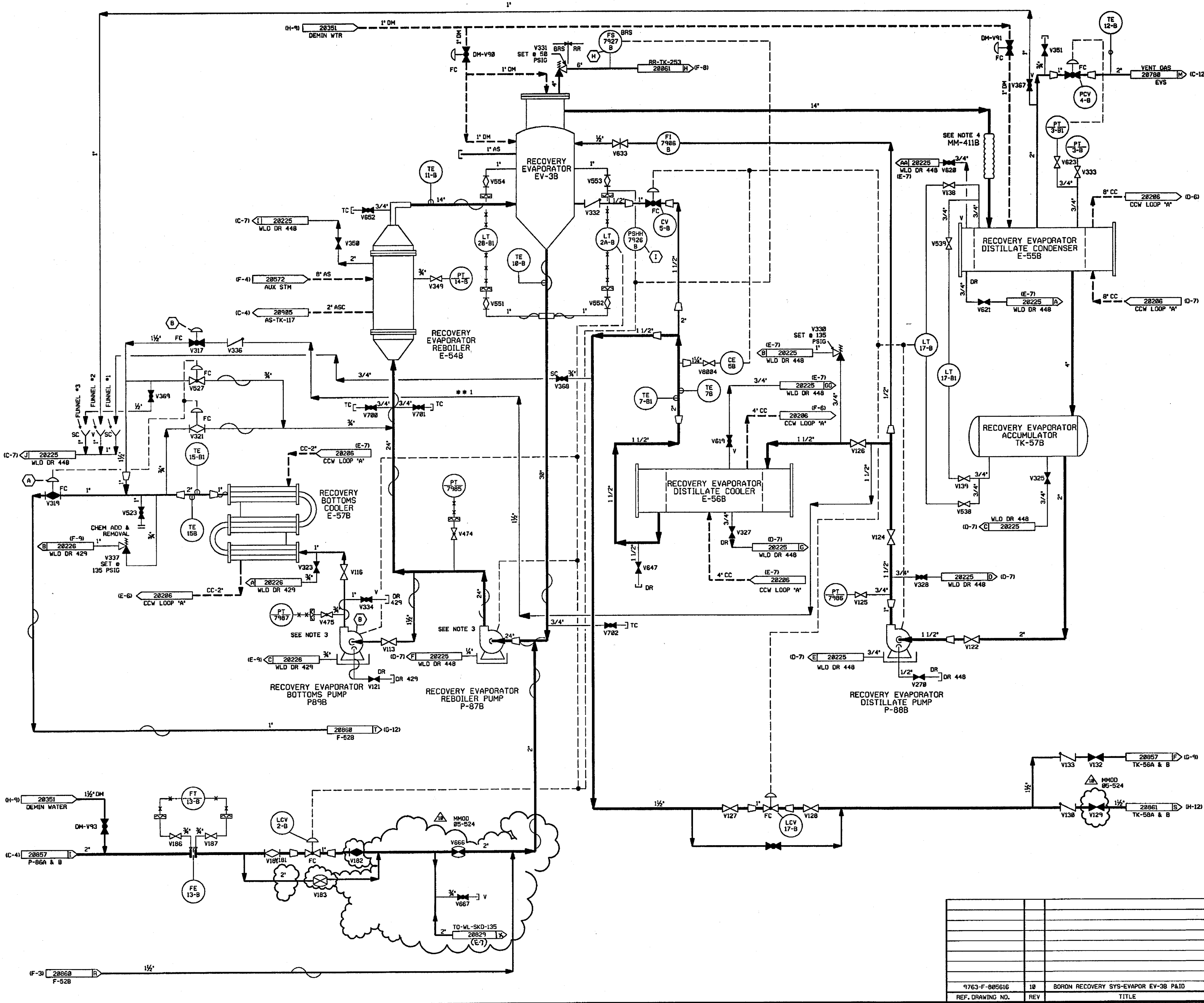
BORON RECOVERY SYSTEM
EVAPORATION
DETAIL

PID- 1-BRS-B20858

9763-F-805615	13	BORON RECOVERY SYS-EVAPOR EV-3A P&ID
REF. DRAWING NO.	REV	TITLE

698078-BRS-1 P10

FOR PAID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS PAID - LEGEND 1 AND PAID - LEGEND 2



- NOTES:
- 1) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "BRS" UNLESS NOTED OTHERWISE.
 - 2) WORK THIS DWG WITH DWG'S 28853, 28854, 28855, 28856, 28857, 28858, 28859 & 28861.
 - 3) SEE DWG DM-28353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
 - 4) ENTIRE LINE IS FLEX CONN.
 - 5) INSTRUMENT REFERENCES:
 - (A) HIGH E-57B OUTLET TEMP, HIGH WS-TK-76 LEVEL AND LOW EV-38 LEVEL WS-TK-76 TRANSFER VALVE INTERLOCK.
 - (B) BRS-P-89B, DISTILLATE FLUSH V317 INTERLOCK.
 - (H) TO I-DM-V98 ON DWG DM-28351 (H-9) & I-BRS-FCV-18 ON DWG AS-28572 (G-6).
 - (I) TO I-DM-V98 ON DWG DM-28351 (H-9) & I-BRS-FCV-18 ON DWG AS-28572 (G-6).
 - 6) Δ INDICATES REVISION LEVEL
 - 7) DELETED
 - 8) ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NNS, UNLESS NOTED OTHERWISE.

10	6/8/06	BCS	JM	27m	INCRP. MM00 85-524 DCN 00, 03
9	8/18/97	MPW	BCS	VWS	INCRP. MM00 96-558 DCN 01
8	12/7/92	MRB	DWS	DJM	INCRP. DCR 87-84 CA 28
7	11/7/92	MRB	BCL	DJM	INCRP. DCR 87-84 CA0
6	12/18/91	MRB	JM	GRM	INCRP. DCR 86-634 CA0
5	5/25/88	GPH	APL	DJM	INCRP. DCR 88-803 REVISED PIPING TO CLARIFY DUPLICATION OF ASSOCIATED SYSTEMS. NOTE 8. ADDED: HEAT TRACE SYMBOL PER LINE LIST. LINE SIZE PER U&C E-150 F-11852 DELETED CHANGE ITEM 1 PER DCR 88-803.
4	9/16/87	JDM	BCL	RRC	INCRP. DCR 86-587, ADDED V-8804 PER EXISTING FIELD CONFIG. DELETED NOTE 7, CORRECTED DRAFTING ERRORS. REVISED TO CLARIFY DUPLICATION OF ASSOCIATED SYSTEMS. ADDED: NOTE 8 PER 885616, CHG. ITEM 1
3	2/18/87	JDM	WRD	VWS	APPROVED CHANGE ITEM #1 PER COMPLETION OF MM00 85-524.
2	12/22/86	FJR	WRD	RRC	INCRP. ECA 19/882818A, ADDED & REV'D CONT. FLAG COORD'S. CORRECTED DRAFTING ERRORS PER U&C P&ID. REF. DWG. LIST. ADDED & REV. CONT. FLAG REF. DWGS. ADDED NOTES 6 & 7.
1	6/28/86	GO	BCL	RRC	INCRP. ECA 19/16888A, ECA 88/882817C & ECA 19/114273A, CHANGE ITEM 1. RESOLVED PER LATEST U&C P&ID. CHANGE ITEM 2 RESOLVED PER ECA 19/881285A.
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

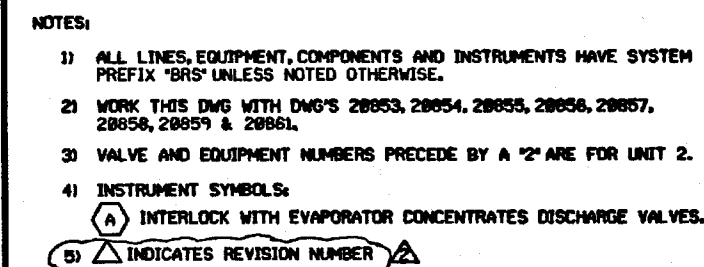
FPL ENERGY Seabrook Station


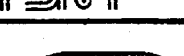
BORON RECOVERY SYSTEM EVAPORATION DETAIL

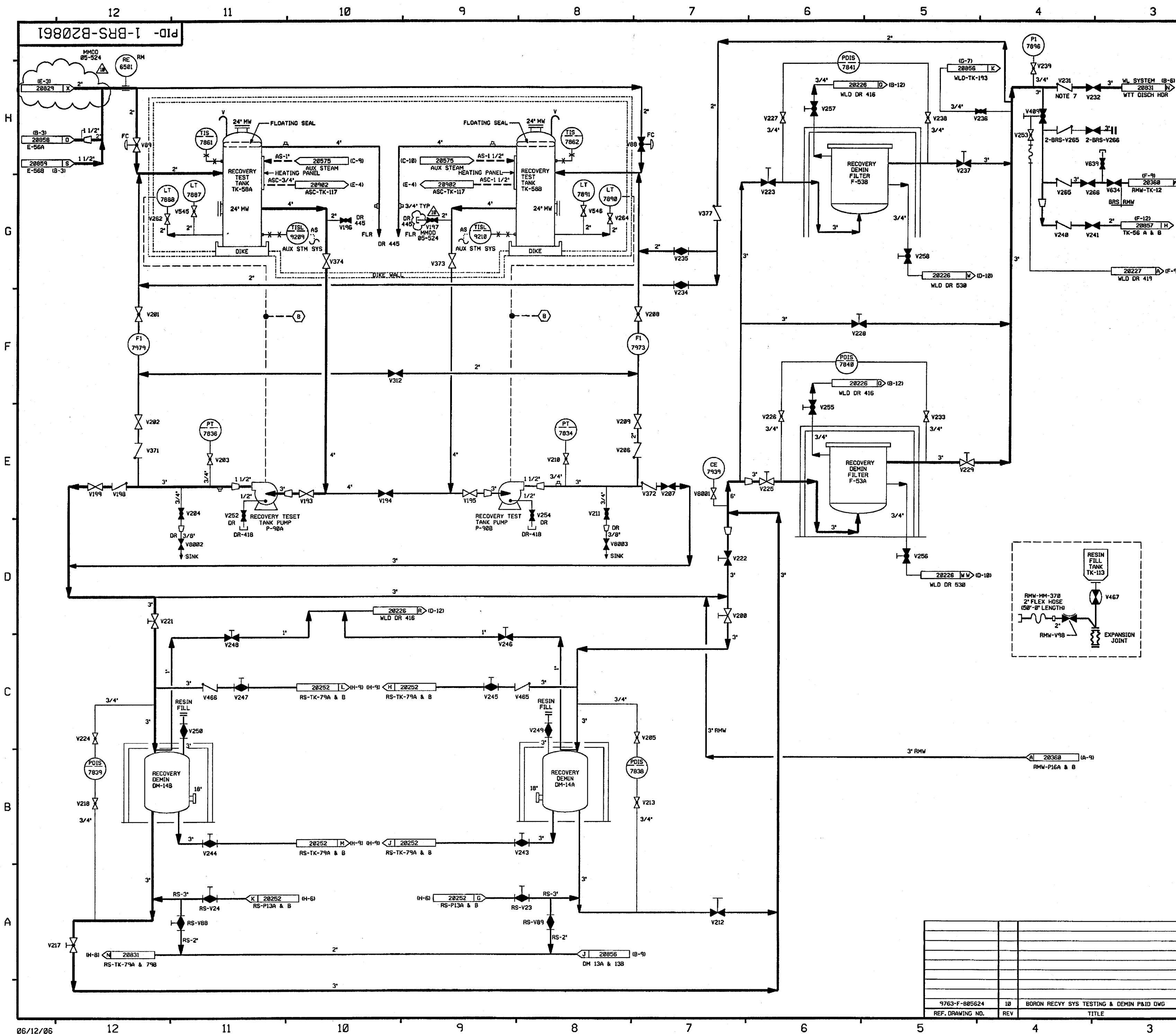
PID- 1-BRS-B20859

9763-F-805616	10	BORON RECOVERY SYS-EVAPOR EV-38 P&ID
REF. DRAWING NO.	REV	TITLE

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS REFER TO
DRAWINGS P&ID LEGEND 1 & LEGEND 2.



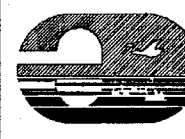
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		BORON RECOVERY SYSTEM EVAPORATION DETAIL	
SEABROOK STATION		PID- 1-BRS-B20860	



FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2

- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX "BRS" UNLESS OTHERWISE NOTED.
 2. WORK THIS DWG WITH DWGS 20853, 20854, 20855, 20856, 20857, 20858, 20859 & 20860.
 3. VALVE & EQUIPMENT NUMBERS PRECEDED BY A "2" ARE FOR UNIT 2.
 4. Δ INDICATES REVISION LEVEL.
 5. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS RMS UNLESS OTHERWISE NOTED.
 6. INSTRUMENT REFERENCES
(B) TO WL-FCV-1458-1 & 2, DRAWING WL-28831
 7. INTERNALS OF CHECK VALVE BRS-V231 HAVE BEEN REMOVED.

10	6/13/04	BCS	JM	ASm	INCORP. MMOD 05-524 DCN-00, 02
9	9/25/03	BCS	JM	JET	INCORPORATED MSE 03-133 REV. 00
8	11/17/98	BCS	MPW	JCM	INCORPORATED DCR 98-029 DCN-01
7	10/21/98	BCS	DWS	DJM	INCORPORATED DCR 98-029 DCN-00
6	7/24/94	BCL	MPW	VWS	INCORPORATED MMOD 95-506 CA-0
5	3/28/89	MRB	PAL	MJY	INCORPORATED DCR 86-185 CA 3
					INCORP. DCR 88-003 REVISED INLETS TO DM-14A & B PER UE & C ISO. V8002, 3 SYMBOL PER AS BUILT CONDITION. PIPING TO CLARIFY ASSOCIATED SYSTEMS ADDED NOTE 5 PER UE & C P & ID 805624, DWG CONT LETTERS.
4	5/25/88	GPM	APL	DJM	RESOLVED CHANGE ITEM 1 PER AS-BUILT COND., CORRECTED INCORP. OF ECA 19/1159648, DELETED NOTE 5.
3	1/7/87	MRJ	WRD	RRC	INCORP. ECA'S 99/117127A & 19/1159648. ADDED DWG CODE TO CONT. FLARE DIKE WALL BOUNDARY. REF DWG NOTE 3 & NOTE FOR DWG REV LEVEL CHANGED V277 TO V227, REVISED P-90A & B DISCH HOR DRAIN VALVE & PIPING FOR DEMIN TKS DM-13A & B.
2	10/17/86	CSB	MAP	RRC	CORRECTED V194 TO GATE, REVISED CONTINUATION, RESOLVED CHNG. ITEM NO.1 INC. 885624 REV. 10
1	6/10/86	DWS	DWS	RRC	INCORPORATE ECA 88/000002 ISSUED FOR OPERATIONS
0	1/13/86	GD	JDM	WFO	
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

**FPL ENERGY**

Seabrook Station

BORON RECOVERY SYSTEM
TESTING & DEMINERALIZATION
DETAIL

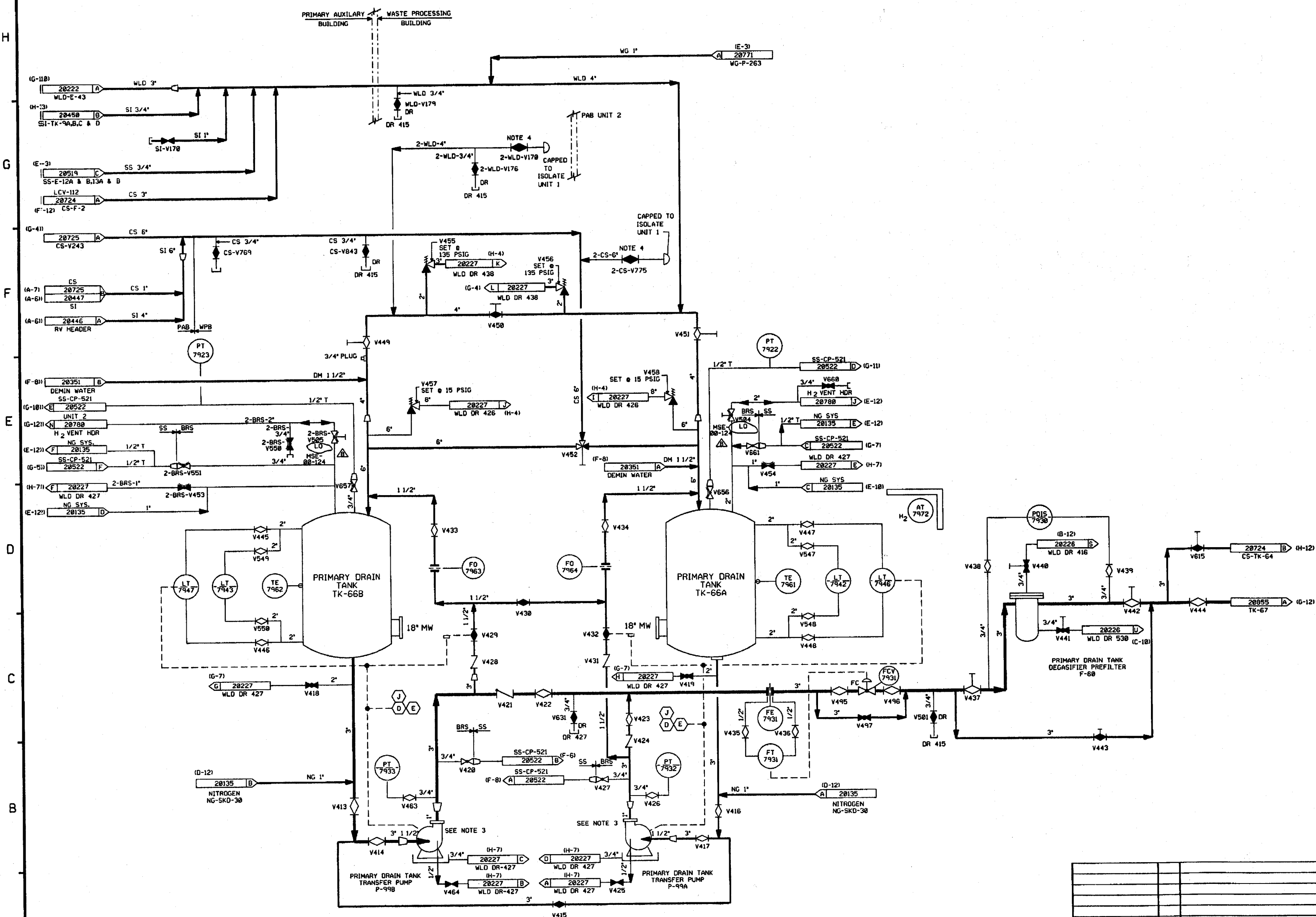
PID- 1-BRS-B20861

7763-F-005524	10	BORON RECVY SYS TESTING & DEMIN P&ID DWG
REF. DRAWING NO.	REV	TITLE

12 11 10 9 8 7 6 5 4 3 2 1

PID-1-BRS-B20854

FOR PAID REFERENCES, DRAWINGS, SYMBOLS
AND ABBREVIATIONS REFER TO DRAWINGS
P&ID - LEGEND 1 AND P&ID - LEGEND 2.



- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 'BRS' UNLESS NOTED OTHERWISE.
 2. WORK THIS DWG WITH DWG'S 20853, 20855, 20856, 20857, 20858, 20859, 20868 & 20861.
 3. SEE DRAWING DM-28353 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
 4. VALVE IS CLOSED DURING UNIT 2 CONSTRUCTION.
 5. Δ INDICATES REVISION LEVEL.
 6. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS MNS, UNLESS NOTED OTHERWISE.
 7. INSTRUMENT REFERENCES:
 - (D) FROM 1-BRS-FS-7925 ON DWG BRS-20855 (F-7)
 - (E) FROM 1-BRS-PSHH-7924 ON DWG BRS-20855 (F-7)
 - (J) FROM 1-BRS-PSH-3-1 ON DWG BRS-20855 (F-5)

8	5/5/94	BCS	---	WVS	BCS	DJM	INCORP MSE 00-124 REV. 8
7	6/6/99	DWS	---	RWS	BCS	DJM	INCORP MHD 970618 DCN#08
6	11/7/92	DWS	---	BCL	DWS	DJM	INCORP DCR 870884 CA#8 & 5
5	4-23-92	MRB	---	MPW	DWS	JEV	REMOVED REF. TO UNIT 2 LATER INCORP MHD'S 91-511 CA# & 91-515 CA#
4	5/26/89	MRB	FCB	PAL	GPM	JW	INCORP DCR 87-118 CA II REVISED CONT. COORD.
3	1/6/88	MPW	JH	DWS	MPW	MJY	INCORP DCR 87-314 & ECA 19/180171A UNIT 2 VALVES SHOWN CLOSED PER NOTE 4. REVISED FLOW ON BYPASS LINE. CONT. COORDINATES ADDED. FLOW ARROW TO TK-66A.
2	10/3/86	CSB	DWS	BCL	VNK	RRC	REV'D VC 11 LINE (FROM VC-P-253) TO AGREE WITH PAID 20822 & REV'D CONT. FLWG (20771). ADDED P&ID BOUNDARY. CONT. FLAG IDENT LETTER 'C' (20851) & 'D' (20852). ADDED 'LCV-112' TO CONT FLAG (20724). ADDED NOTE 5.
1	6/19/86	JDM	OPD	DWS	JMCS	RRC	REMOVED CHANGE ITEMS 1 & 2. INCORP ECA'S 19/2469B, 19/116821A, 19/116172A, AND 095626 REV. 11
9	1/13/86	GO	SKN	JDM	ASK	WFD	ISSUED FOR OPERATIONS
REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION

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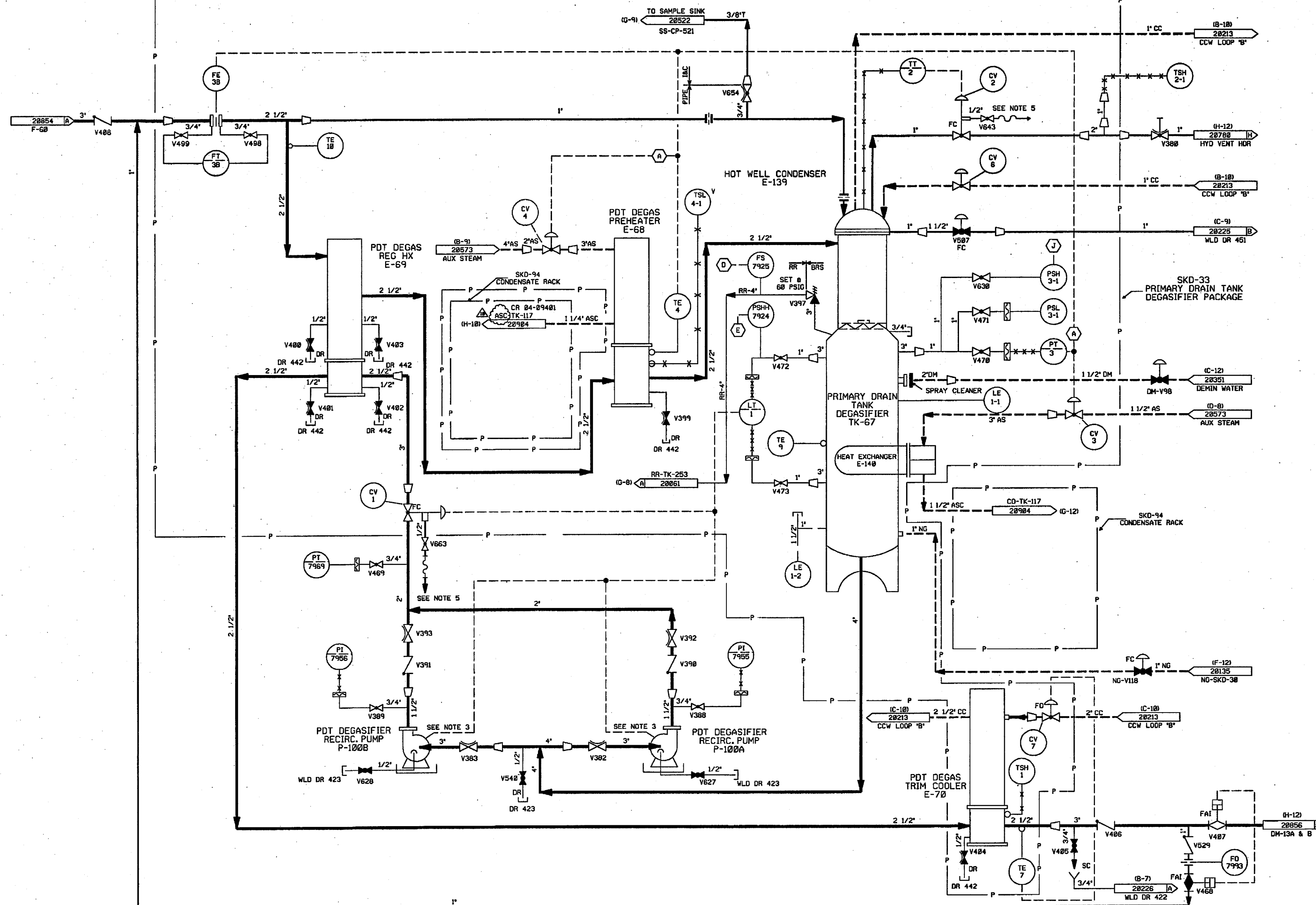
BORON RECOVERY SYSTEM
DEGASIFICATION
DETAIL

PID- 1-BRS-B20854

9763-F-895626 11 BORON RECOVERY SYS PRI DRAIN TKS PAID
REF. DRAWING NO. REV. TITLE

PID-1-BRS-B20855

FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



- NOTES:
1. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS HAVE SYSTEM PREFIX 'BRS' UNLESS NOTED OTHERWISE.
 2. WORK THIS DWG WITH DWG'S 20853, 20854, 20856, 20857, 20858, 20859, 20869 & 20861.
 3. SEE DWG DM-20354 FOR WATER SUPPLY TO PUMP DOUBLE MECHANICAL SEALS.
 4. Δ INDICATES REVISION LEVEL.
 5. REFER TO DRAWING VSL-20774 FOR VALVE LEAKOFF.
 6. ALL LINES, EQUIPMENT, COMPONENTS AND INSTRUMENTS ARE SAFETY CLASS NMS UNLESS NOTED OTHERWISE.
 7. INSTRUMENT REFERENCES:
 (A) TO 1-BRS-CV-3 & 4 ON DWG AS-20573 (IC-10).
 (E) TO 1-AS-CV-3, 1-AS-CV-4 ON DWG AS-20573 (IC-9).
 (J) TO 1-BRS-P-99A & B ON DWG BRS-20854 (IC-8) (IC-10).
 TO 1-DM-V98 ON DWG DM-20351 (IC-12)

RECORDS MANAGEMENT DEPT.
CONTROL NUMBER

10	12-8-04	BCS	JM	RRB	INCORP CR 04-09401 REV. 00
9	8/30/04	BCS	MPW	RCP	INCORP MMOD 98-641 DCN-00
8	12/7/92	MRB	DWS	DJM	INCORP DCR 87-04 CA 20
7	11/7/92	MRB	BCL	DJM	INCORP DCR 87-04 CA#9, 5 & 25 ADDED NOTE 14 & INSTR. REFERENCE REMOVED FLANGES FROM B P&ID
6	12/20/89	MRB	PAL	ES	INCORP DCR 86-113 CA01. INCORP DCR 88-003 REVISED V382, 383, 393, 397, 399, 400, 401, 402, 403, & 404 VALVE SYMBOL PER FP 53678. ADDED RESTRICTING ORIFICE SYMBOL TO INLET E-139 PER FP 53758, NOTE 6 PER UE & C P & ID 805618.
5	5/25/88	GPM	APL	DJM	INCORP ECA 19/1079088 REV'D TO CLARIFY DUPLICATION OF ASSOC SYSTEM & NOTE 3. ADDED NOTE 5, CONT. COORD. LINE SIZE & FLD'S
4	8/14/87	GPM	MPW	RRC	INCORP DCR-618
3	1/23/87	JDM	WHD	RRC	REMOVED NONAPPLICABLE REF DWGS. INCORP NCR 95/116A ECA 19/11727A SYSTEM CHANGED TO BRS ON VALVES CV-3, CV-4, CV-5 & CV-7. WAS AS AND CC IN ERROR, ADDED CONTINUATIONS.
2	1/26/86	MPW	MAP	RRC	INCORP'D ECA 99/114788A
1	6/16/86	DWS	JDM	RRC	ISSUED FOR OPERATIONS
0	1/13/86	GD	JDM	WFD	
REV	DATE	DSGN	CHKD	CE	DESCRIPTION

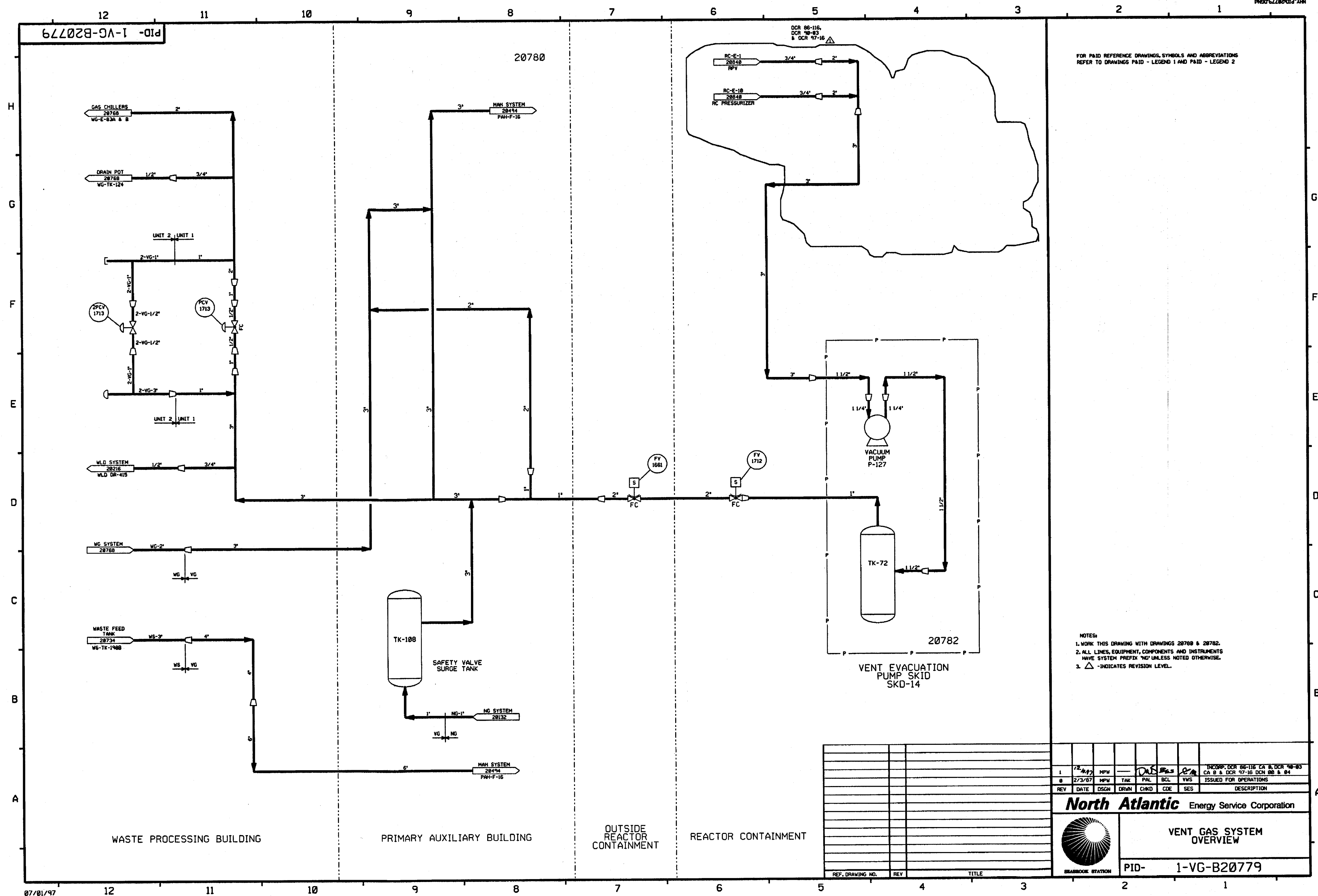
FPL ENERGY Seabrook Station

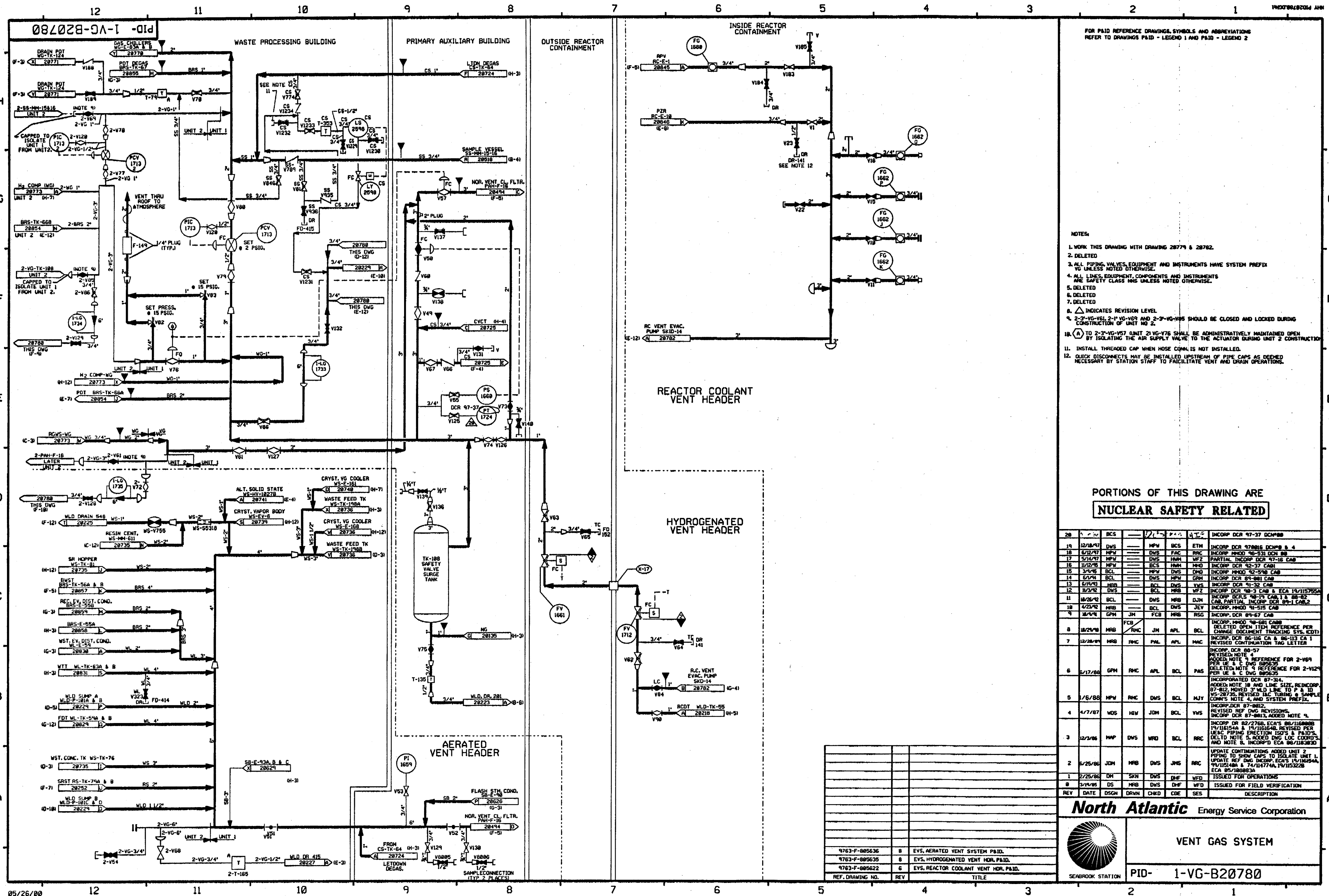


BORON RECOVERY SYSTEM
DEGASIFICATION
DETAIL

PID- 1-BRS-B20855

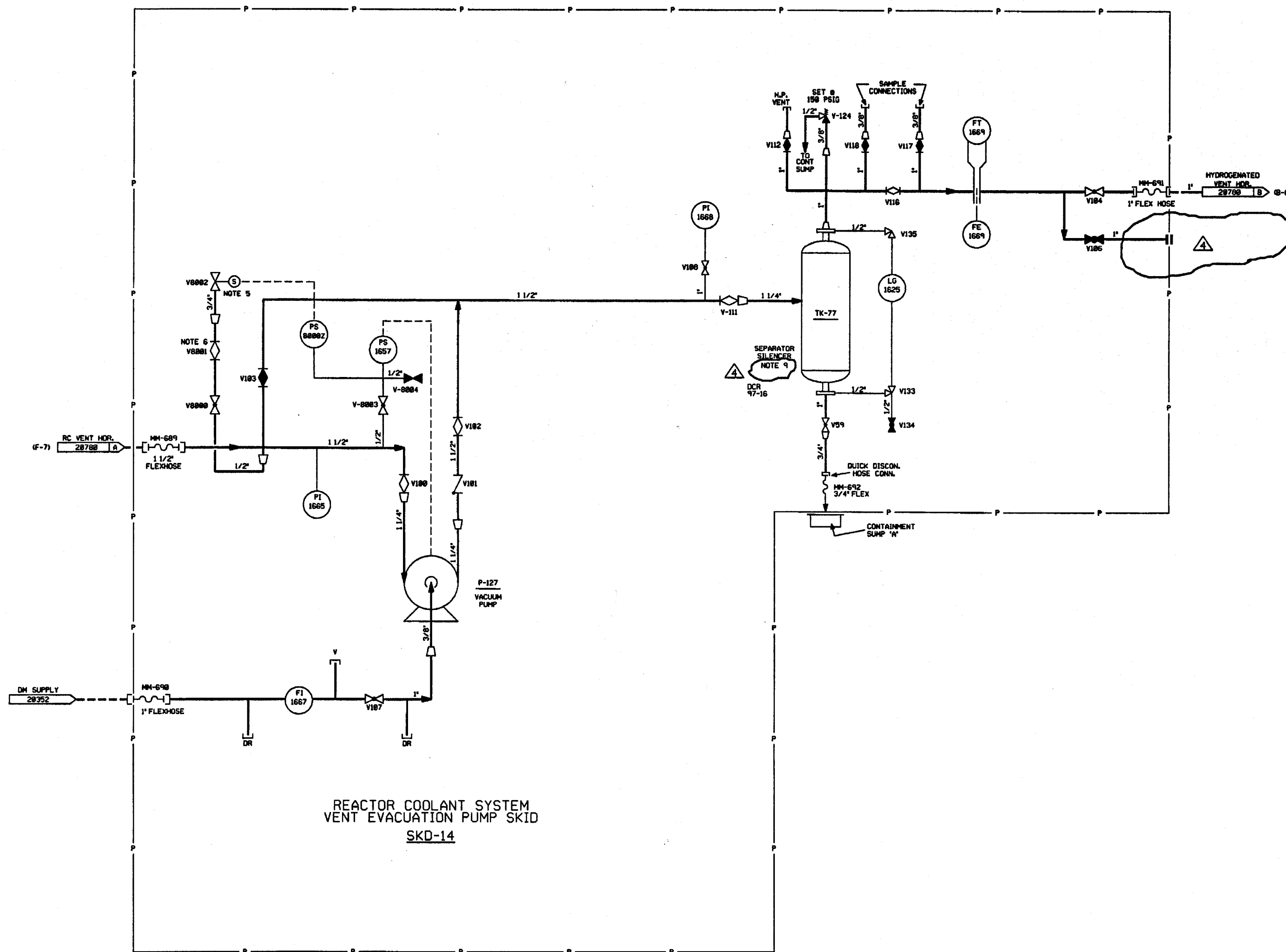
9763-F-805618	10	BORON RECOV SYS-PRIM DRAIN TK DEGAS P&ID
REF. DRAWING NO.	REV	TITLE





PID-1-VG-B20782

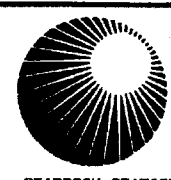
FOR P&ID REFERENCE DRAWINGS, SYMBOLS AND ABBREVIATIONS
REFER TO DRAWINGS P&ID - LEGEND 1 AND P&ID - LEGEND 2



- NOTES:
1. WORK THIS DRAWING WITH 28788.
 2. SYSTEM DESCRIPTION NO IS 34.
 3. SYSTEM PREFIX IS "VG" UNLESS OTHERWISE NOTED.
 4. SYSTEM DESIGN PRESSURE (EXCLUDING PUMP) 150 PSIG.
PUMP DESIGN PRESSURE 119 PSIG
SYSTEM DESIGN TEMPERATURE 1680 F
 5. VACUUM BREAKER ASSEMBLY CONSISTING OF V-1000, V-1001, V-1002, AND PS-10002-SET AT 28 IN. HG VAC.
 6. VALVE V-1001 IS SET TO METER FLOW TO MAINTAIN 19 1/2 IN. HG VAC.
 7. ALL PIPING AND INSTRUMENTS ARE SAFETY CLASS UNLESS NOTED OTHERWISE.
 8. Δ INDICATES REVISION LEVEL.
 9. DURING PERIODS OF PRESSURIZER PURGING, 1-VG-SKD-143 MAY BE INSTALLED IN PLACE OF 1-VG-TK-77, REF. DCR 97-16.

REV	DATE	DSGN	DRWN	CHKD	CDE	SES	DESCRIPTION
4	12/10/97	MPH		BCL	DUS	AM	INCRP. DCR 97-16 DCH 88 & 84. REMOVED LATER CONTINUATION
3	1/24/98	NRB	RMC	JH	APL	BCL	INCRP. MM00 98-516 CA 8
2	1/18/98	JDM	OPD	WRD	BCL	RRC	INCRP. ECR 88-187988, REV'D VALVE TYPES & POSITION PER USAC P&ID, REV'D REVISION BLOCK & ADDED NOTE 8, DNG. LOC. COORDS.
1	6/18/96	BCL	SKN	JDM	JMS	RRC	ISSUED FOR OPERATIONS, ADDED TAG NUMBERS
0	2/28/95	MOB	W/A	JHM	DNF	WFD	INITIAL ISSUE

North Atlantic Energy Service Corporation



VENT GAS SYSTEM
RCS AIR EVACUATION SKID
P & I DIAGRAM

PID-1-VG-B20782

REF. DRAWING NO.	REV	TITLE
9763-F-885622	6	EVS, REACTOR COOLANT VENT HOR. P & ID